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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

STEVE WONG, on his own behalf and on
behalf of all others similarly situated,

Plaintiff,

vs.

KEMET CORPORATION;

KEMET ELECTRONICS CORPORATION;

NEC TOKIN CORPORATION;

NEC TOKIN AMERICA, INC.;

PANASONIC CORPORATION;

**PANASONIC CORPORATION OF NORTH
AMERICA;**

SANYO ELECTRIC CO., LTD.;

**SANYO ELECTRONIC DEVICE (U.S.A.)
CORPORATION;**

CASE NO.

**CLASS ACTION COMPLAINT FOR
DAMAGES AND INJUNCTIVE RELIEF
ON BEHALF OF FIRST-LEVEL
INDIRECT PURCHASERS FOR:**

**(1) VIOLATION OF THE FEDERAL
SHERMAN ACT (15 U.S.C. §1);**

**(2) VIOLATION OF THE CALIFORNIA
CARTWRIGHT ACT (CAL. BUS. &
PROF. CODE §§ 16720, *ET SEQ.*); AND**

**(3) VIOLATION OF THE CALIFORNIA
UNFAIR COMPETITION LAW (CAL.
BUS. & PROF. CODE §§17200, *ET SEQ.*)**

DEMAND FOR JURY TRIAL

1 **SAMSUNG ELECTRONICS CO., LTD.;**

2 **SAMSUNG ELECTRO-MECHANICS;**

3 **SAMSUNG ELECTRO-MECHANICS**
4 **AMERICA, INC.;**

5 **TDK CORPORATION;**

6 **KYOCERA CORPORATION;**

7 **AVX CORPORATION;**

8 **VISHAY INTERTECHNOLOGY, INC.;**

9 **HITACHI AIC;**

10 **HITACHI CHEMICAL CO., LTD.;**

11 **HITACHI CHEMICAL COMPANY**
12 **AMERICA, LTD.;**

13 **ROHM CO., LTD.;**

14 **ROHM SEMICONDUCTOR U.S.A., LLC;**

15 **ROHM U.S.A., INC.;**

16 **NIPPON CHEMI-CON CORPORATION;**

17 **UNITED CHEMI-CON, INC.;**

18 **NICHICON CORPORATION;**

19 **NICHICON (AMERICA) CORPORATION;**

20 **RUBYCON CORPORATION;**

21 **RUBYCON AMERICA INC.;**

22 **ELNA CO., LTD.;**

23 **ELNA AMERICA INC.;**

24 **TOSHIN KOGYO CO., LTD.**

25
26
27
28 Defendants.

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Plaintiff **STEVE WONG**, individually and on behalf of all others similarly situated brings this lawsuit against Defendants KEMET Corporation, KEMET Electronics Corporation (referred to jointly as “KEMET”), NEC TOKIN Corporation, NEC TOKIN America, Inc. (referred to jointly as “NEC”), Panasonic Corporation, Panasonic Corporation of North America (referred to jointly as “Panasonic”), SANYO Electric Co., Ltd., SANYO Electronic Device (U.S.A.) Corporation (referred to jointly as SANYO”), Samsung Electronics Co., Ltd., Samsung Electro-Mechanics, Samsung Electro-Mechanics America, Inc. (referred to jointly as “Samsung”), TDK Corporation (“TDK”), Kyocera Corporation (“Kyocera”), AVX Corporation (“AVX”), Vishay International, Inc. (“Vishay”), Hitachi AIC, Hitachi Chemical Co., Ltd., Hitachi Chemical Company America, Ltd. (referred to jointly as “Hitachi”), ROHM Co., Ltd., ROHM Semiconductor U.S.A., LLC, ROHM U.S.A., Inc. (referred to jointly as “ROHM”), Nippon Chemi-Con Corporation, United Chemi-Con, Inc. (referred to jointly as “Nippon Chemi-Con”), Nichicon Corporation, Nichicon (America) Corporation (referred to jointly as “Nichicon”), Rubycon Corporation, Rubycon America Inc. (referred to jointly as “Rubycon”), ELNA Co., Ltd., ELNA America Inc. (referred to jointly as “ELNA”) (collectively "Defendants") for violations of federal and state antitrust laws related to the price-fixing of Capacitors, specifically Aluminum Capacitors and Tantalum Capacitors. Plaintiff brings this action, individually and on behalf of all others similarly situated to recover monetary damages and to obtain injunctive and declaratory relief.

I. INTRODUCTION

1. This is an antitrust class action for damages and injunctive relief against the Defendants for violations of Section 1 of the Sherman Act, 15 U.S.C. § 1 and the California Cartwright Act (California Business and Professions Code §§ 16720, *et seq.*). Defendants are liable to Plaintiff and the members of the proposed Class for injunctive relief pursuant to Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26 and for treble monetary damages pursuant to California Business & Professions Code § 16750.

2. This case involves a wide-ranging conspiracy amongst the Defendants to fix and stabilize the price of Capacitors, specifically Aluminum Capacitors and Tantalum Capacitors, throughout the United States, particularly in the State of California. Capacitors are electronic

components that store, filter, and regulate electrical energy and current flow. A Capacitor is generally referred to as being a passive component because capacitors do not require electrical power to operate. As an essential passive component used in most circuit boards, capacitors are typically used for coupling, decoupling, filtering, oscillating and wave shaping and are used in communication systems, data processing equipment, personal computers, cellular phones, automotive electronic systems, defense and aerospace systems, consumer electronics, power management systems and many other electronic devices and systems. Basically, Capacitors are used in anything that plugs in or has a battery to ensure that the power voltage going through an electronic device is controlled and managed. Capacitors can be found in a vast array of electronic devices, from consumer electronics like smartphones and tablets to heavy industrial machinery. According to sources close to the situation, the United States Department of Justice (“DOJ”) is cooperating with antitrust enforcers in Europe to Asia, including the People's Republic of China's National Development and Reform Commission (“NDRC”), as part of a sprawling international investigation of a price-fixing conspiracy in the Capacitor industry.

3. This civil antitrust action is brought, seeking damages and injunctive relief for the collusive, illegal and concerted restraint of trade in the Aluminum Capacitor and Tantalum Capacitor Markets. This restraint of trade was conducted by the Defendants, all of whom are major global players in the Capacitors Market, and are part of a dominant few who control the Aluminum Capacitor and Tantalum Capacitor Markets. The Defendants should be direct competitors in these two markets but instead have colluded in manipulating the price of Aluminum Capacitors and Tantalum Capacitors. Plaintiff alleges, individually and on behalf of all others similarly situated, that the Defendants have conspired to fix, raise, maintain and stabilize the prices in the Aluminum Capacitor and Tantalum Capacitor Markets from at least January 1, 2005 through the present (the “Class Period”).

4. According to published reports, the NDRC raided two Japanese capacitor manufacturers in China in March of 2014, Defendants NEC and TYC. Both NEC and TYC have acknowledged that they are cooperating with antitrust investigators. South Korea's Fair Trade Commission (“FTC”) conducted raids in the first week of May of 2014 at the Korean facilities of

Defendant Panasonic, a major Japanese Capacitor manufacturer. The Japanese Fair Trade Commission (“FTC”) and European Union antitrust enforcers have each initiated their own investigations into the capacitor price-fixing conspiracy. According to press reports, one Japanese corporation has applied to the DOJ's antitrust amnesty program, which grants certain protections to a cooperative entity that reports on collusive, anticompetitive conduct.

5. In June of 2014, the Japanese FTC conducted on-site inspections at the Japanese facilities of nine capacitor manufacturers, including Defendants Panasonic, its subsidiary SANYO, Nippon Chemi-Con, Hitachi, Nichicon and NEC, a subsidiary of Defendant KEMET. The investigations are focused on a conspiracy amongst the major capacitor manufacturers, particularly in the Aluminum Capacitors and Tantalum Capacitors markets, to fix, stabilize, maintain and raise the price of these two kinds of capacitors to supra-competitive levels. Within the larger Capacitors market, the market for these two types of capacitors (Aluminum Capacitors and Tantalum Capacitors) is highly susceptible to price manipulation since they are highly commoditized products with a limited number of products who dominate the market. According to Japanese FTC investigators, the conspiracy intensified in the aftermath of the 2008 financial crisis precipitated by the debacle triggered by the explosion of subprime mortgages and the mortgage backed securities that followed those subprime mortgages. In response to the economic crisis, the cartel members became more aggressive in controlling supply and agreeing on prices to ensure that they could charge supra-competitive prices for their products. The 2011 Great East Japan Earthquake and the resulting tsunami also greatly impacted the Japanese economy. Since many of the major capacitor manufacturers were Japanese, this disaster proved to be another influential case in the continuing conspiracy amongst the Defendants to conspire to fix, stabilize, maintain and raise the prices of Aluminum Capacitors and Tantalum Capacitors to supra-competitive levels.

6. The Capacitors Market is substantial since capacitors are a component of almost every electronic device that is used. According to recent reports, in 2013, global sales for capacitors were approximately \$18.25 billion. A report from Research and Markets, an industry research firm, forecasts that the global Capacitor market will reach **\$20.2 billion** in revenue by 2018. According to industry analysts, in terms of sales by dollar value, Aluminum Capacitors

1 constitute approximately 23% of the overall Capacitors Market while Tantalum Capacitors
2 constitute about 10% of the overall Capacitors Market. Other capacitors, however, are not
3 interchangeable with Aluminum Capacitors and Tantalum Capacitors because of the unique
4 characteristics of each type of capacitor. Manufacturers produce trillions of Capacitors every year.
5 Most capacitors, however, are relatively inexpensive, with the average price for unit for capacitors
6 over the last five years being around \$0.01178. However, with the sheer quantity of capacitors
7 being sold, the Capacitors Market can be a source of huge profits for manufacturers.

8 7. There are many different types of Capacitors in the marketplace but there are still
9 only a few corporations that dominate the Capacitor industry. For example, there are ceramic
10 capacitors, aluminum electrolytic capacitors, film capacitors, and tantalum capacitors, all of which
11 are distinguished by the materials used for the electrical conductors and the dielectric material that
12 form the core of the vast majority of capacitors. The actual form of a Capacitor can vary between
13 the different types of capacitors but all contain at least two electrical conductors (plates), one of
14 which is positively charged and one of which is negatively charged, separated by a dielectric non-
15 conductive material. One of the plates is referred to as the anode and the other is referred to as the
16 cathode. The dielectric material is an insulating material that allows the capacitor to hold a charge.
17 Capacitors do not dissipate energy but instead stores energy in the form of an electrostatic field
18 between the two plates. The plates can be made of different substances such as aluminum foil or
19 tantalum.

20 8. Capacitors are generally measured by their capacitance, which is a measure of the
21 ability of the capacitor to store an electrical charge. Different types of capacitors are best used for
22 different types of products. For example, Tantalum Capacitors generally have higher capacitance
23 values at smaller sizes and therefore are used in products such as cell phones. Within the different
24 categories of capacitor types, capacitors are commodities which are readily interchangeable. For
25 example, a Tantalum Capacitor manufactured by one corporation can be readily replaced by a
26 Tantalum Capacitor manufactured by another corporation in most circumstances. Capacitors are
27 generally not interchangeable between different types, such that supercapacitors cannot replace
28 Tantalum Capacitors and film capacitors cannot replace Aluminum Capacitors, due to differences

1 in capacitance and differences in the physical properties of electrical conductors and dielectrics of
2 different materials.

3 9. Capacitors do not just vary in terms of capacitance and materials used. Capacitors
4 can also vary by form factor. Form factor refers to the shape and size of the capacitor. Smaller
5 electronic devices require capacitors with a smaller form factor. For example, aluminum
6 electrolytic capacitors are generally cylindrical and made from two layers of thin aluminum foil
7 with a non-conducting, usually paper material, between those two layers of aluminum foil.

8 10. This lawsuit relates to the Defendants' conspiracy to fix, raise, maintain and
9 stabilize the price of Aluminum Capacitors and Tantalum Capacitors at supra-competitive levels.
10 The Defendants entered into this conspiracy in order to ensure that the Defendants could continue
11 to reap high profits from the sale of Aluminum Capacitors and Tantalum Capacitors, to the
12 detriment of consumers, including Plaintiff and members of the proposed Class. The Defendants
13 conspired by entering into anticompetitive agreements to maintain price floors for Capacitors and
14 to raise prices jointly. The Defendants agreed not to compete against each other on price so that all
15 of the Defendants could continue to charge supra-competitive prices for Capacitors. Overall, there
16 are only a few dominant capacitor manufacturers. Within the Aluminum Capacitors and Tantalum
17 Capacitors Markets, the numbers are even smaller. There are a few manufacturers that cross-over
18 between the two markets, manufacturing both Aluminum Capacitors and Tantalum Capacitors. In
19 the Aluminum Capacitor Market, in 2013, approximately 64% of the market is controlled by
20 Japanese manufacturers, which are dominated by four corporations, Defendants Rubycon,
21 Nichicon, Nippon Chemi-Con and Panasonic. The remainder of the market is filled by a few
22 manufacturers in Taiwan and the People's Republic of China. The Tantalum Capacitor Market is
23 even more centralized, dominated by four major players: Defendants AVX, KEMET-NEC TOKIN,
24 Panasonic, and Vishay. Moreover, the Defendants are using acquisitions to further shrink the
25 number of capacitor manufacturers in the world.

26 11. The Capacitors Market has many characteristics that make it highly susceptible to
27 an antitrust conspiracy. There are extremely high barriers to entry into the Capacitors Market,
28 which is a relatively mature market. The costs necessary to achieve the large volume of sales

1 required to reach economies of scale and profitability make it extremely difficult for a new market
2 entrant. Furthermore, Aluminum Capacitors and Tantalum Capacitors are relatively
3 interchangeable commoditized products. Although the costs of being able to manufacture large
4 quantities of Capacitors require a massive infusion of capital, resources and technological
5 knowledge, there is little to technologically differentiate the Aluminum Capacitors and Tantalum
6 Capacitors of one manufacturer with another. Price is the most obvious differentiation among
7 these products for purchasers. In a market of this nature, with trillions of components being
8 manufactured and sold a year at relatively inexpensive individual prices, there is a huge incentive
9 to fix, stabilize, maintain and raise the prices of the components to supra-competitive levels
10 through illegal conspiratorial agreements. By foregoing competition, each manufacturer could still
11 guarantee themselves massive profits in such a high volume market. Furthermore, manipulated
12 prices would be hard to detect due to the overall low price for each individual capacitor. This
13 anticompetitive conspiracy causes substantial harm to consumers, to competition, to United States
14 commerce and to commerce in the State of California.

15 12. The antitrust conspiracy in the Aluminum Capacitors and Tantalum Capacitors
16 Markets is the creation of the Defendants, who have collusively and concertedly manipulated price
17 competition for Aluminum Capacitors and Tantalum Capacitors throughout the world. This
18 conspiracy has a direct effect on commerce in the United States, which is one of the largest
19 purchasers of capacitors. This conspiracy also has a direct effect on commerce in the State of
20 California since California consumers are one of the largest groups of capacitor consumers in the
21 United States. Defendants' conspiracy was entered into intentionally and willfully, with
22 knowledge and the intent that their acts would affect United States consumers, as well as
23 consumers within the states of the United States, including the State of California. Their
24 conspiracy did in fact affect United States and California commerce. At least one capacitor
25 manufacturer, which is believed to be Defendant Panasonic, has sought to take advantage of the
26 DOJ Antitrust Division's amnesty program by self-reporting their involvement in the antitrust
27 cartel in the Capacitors Market. Defendant Panasonic is one of the biggest manufacturers in both
28 the Aluminum Capacitors Market and the Tantalum Capacitors Market.

13. The Defendants formed, maintained, enforced and concealed a global cartel in the Capacitors Market, spurred on by economic changes in the early 2000s. The market for Aluminum Capacitors in particular began to shrink during this period because of the unique characteristics of Aluminum Capacitors. Aluminum Capacitors have historically been used in a number of electronic devices, such as televisions, stereos and desktop computers, but they were always limited in terms of capacitance, especially at smaller sizes. In other words, with the growth in smaller electronic devices, such as tablets and smartphones, Aluminum Capacitors could not be used to meet that demand since they could not maintain sufficient capacitance to fit those types of devices. With a stagnant or shrinking market, the major manufacturers of Aluminum Capacitors, principally the Japanese manufacturers, Defendants Rubycon, Nichicon, Nippon Chemi-Con and Panasonic spearheaded the formation and maintenance of a cartel in the Aluminum Capacitors market. In order to protect their profits in this market environment, the Defendants entered into a conspiracy to manipulate the price of Aluminum Capacitors.

14. Tantalum Capacitors can handle higher capacitance at smaller sizes because of tantalum's non-conductive properties and its thinner dielectric. However, the demand for Tantalum Capacitors also waned in the 2000s, particularly in the late 2000s, in the aftermath of the 2008 economic crisis. Tantalum Capacitors, as opposed to Aluminum Capacitors, or ceramic capacitors, which are the cheapest to manufacture, require substantial investment of labor and resources. Due to the size of the investment necessary to successfully mass manufacture Tantalum Capacitors, declining demand for Tantalum Capacitors can substantially impact a manufacturer, who cannot easily shift to the manufacture of different capacitors due to market conditions. Instead, when market demand falls, Tantalum Capacitor manufacturers are highly motivated to enter into an illegal agreement to fix, stabilize, maintain and raise the price of Tantalum Capacitors to ensure continuing profitability. Considering the small number of manufacturers who dominate this market, such agreements are easy to enter into. Similar to the Aluminum Capacitors market, throughout the 2000s and into the 2010s, the Tantalum Capacitors market was either stagnant or shrinking, forcing the Defendants to form a cartel to protect their profits in this market environment.

1 15. Overall, from approximately 2005 to 2013, there has slowly been an overall decline
2 in the Aluminum Capacitors and Tantalum Capacitors Markets. However, even with the declining
3 demand for capacitors, the Capacitors Market is still a huge market. Industry analysts report that
4 global revenues for Aluminum Capacitors and Tantalum Capacitors were approximately \$5.74
5 billion in 2013. Nevertheless, in order to slow down the loss of profitability from such decline, the
6 Defendants agreed to end price competition amongst themselves.

7 16. For at least the last nine years, from 2005 to the present, if not longer, the
8 Defendants conspired together by directly and indirectly communicating with each other to
9 effectuate a scheme to control and manipulate market prices of Aluminum Capacitors and
10 Tantalum Capacitors directed towards and sold into the United States market, which includes the
11 California market. Defendants also agreed to combine and perform the various acts necessary to
12 achieve the anticompetitive purposes of this scheme.

13 17. This conspiracy was furthered and facilitated by a course of anticompetitive
14 conduct, including agreements and understandings amongst Defendants to fix, stabilize, maintain
15 and raise the prices for Aluminum Capacitors and Tantalum Capacitors to supra-competitive and
16 inflated levels, as well as agreements to restrain their output in order to control the supply of
17 Aluminum Capacitors and Tantalum Capacitors. These agreements were concealed from
18 consumers, oftentimes by giving pretextual reasons for price increases or output reductions.

19 18. Defendants' illegal conspiracy and cartel in the Capacitors Market has been
20 successful in achieving the anticompetitive and unlawful ends for which it was formed. Through
21 their concerted actions, Defendants were able to successfully fix, stabilize, maintain and raise the
22 price of Aluminum Capacitors and Tantalum Capacitors to inflated, artificially high levels during
23 the Class Period to purchasers in the United States, particularly purchasers in the State of
24 California. Defendants were effective in moderating, and even negating the normal downward
25 pressures for prices that are typically caused by such factors as price competition, oversupply,
26 reduction of demand and technological change.

27 19. Through anticompetitive and conspiratorial agreements, the Defendants have
28 engaged in illegal acts in violation of federal antitrust laws. Defendants' anticompetitive and

unlawful acts have resulted in the increase or slowed the decrease in price of Aluminum Capacitors and Tantalum Capacitors sold in the United States and in the State of California during the Class Period. Plaintiff and the members of the proposed Class purchased Capacitors from Defendants, their divisions, subsidiaries or affiliates, or their co-conspirators during the Class Period. Through these illegal acts, Plaintiff, and members of the proposed Class, paid and continue to pay artificially inflated prices that exceeded the amount they would have paid if a competitive market had determined prices for Capacitors. Plaintiff, and the proposed Class, therefore have suffered the type of injury that the antitrust laws are designed to prevent.

20. Defendants' anticompetitive and exclusionary acts, individually and collectively, were intended to, and had the effect of, unreasonably restraining competition in the Aluminum Capacitors and Tantalum Capacitors Markets. Plaintiff brings this action on behalf of a Class consisting of all persons in the State of California who purchased or otherwise acquired Capacitors during the Class Period.

II. PARTIES

A. PLAINTIFF

21. Plaintiff **STEVE WONG** purchased Aluminum and Tantalum Capacitors manufactured, marketed and sold by the Defendants from capacitor distributors who purchased and/or acquired these Aluminum and Tantalum Capacitors directly from the Defendants during the Class Period, from at least January 1, 2005 to the present. Steve Wong is a California resident and suffered his injury in California. As a direct and proximate result of Defendants' anticompetitive conduct alleged herein, Plaintiff paid supra-competitive prices for the Capacitors during the Class Period and as such, has suffered injuries directly related to the anticompetitive conduct of the Defendants. Plaintiff will also continue to suffer harm if the Defendants' are not enjoined from continuing their unlawful conduct. Plaintiffs' claims are typical of the claims of the members of the proposed class.

B. DEFENDANTS

1. KEMET Defendants

22. Defendant **KEMET Corporation** (“**KEMET**”) is a Delaware corporation with its headquarters at 2835 Kemet Way, Simpsonville, South Carolina. Defendant **KEMET Electronics Corporation** is a Delaware corporation with its headquarters at 2835 Kemet Way, Simpsonville, South Carolina. Defendant KEMET Electronics Corporation is a wholly owned subsidiary of KEMET Corporation. Defendants KEMET Corporation and KEMET Electronics Corporation are hereinafter jointly referred to as “**KEMET.**” In fiscal year 2007, KEMET acquired the tantalum business units of EPCOS AG. In fiscal year 2008, KEMET acquired Evox Rifa Group Oyj and Arcotronics Italia S.p.A. and, as a result, entered into the markets for film, electrolytic and paper capacitors. In fiscal year 2008, KEMET sold its wet tantalum business to Defendant Vishay Intertechnology, Inc. In fiscal year 2011, KEMET acquired Cornell Dubilier Foil, LLC and in fiscal year 2012, KEMET acquired Niotan, Inc., which allowed KEMET to vertically integrate certain manufacturing processes within its Film and Electrolytic Business Group and its Tantalum Business Group.

23. In fiscal year 2012, KEMET also announced its intention to acquire Defendant **NEC TOKIN Corporation**, one of the largest capacitor manufacturers in the world, particularly in the tantalum capacitor market. KEMET entered into an agreement to acquire a 34% economic interest and 51% voting interest in NEC TOKIN Corporation, with the option to acquire 100% of NEC TOKIN Corporation. Defendant NEC TOKIN Corporation is a Japanese corporation with its principal place of business at 7-1 Kohriyama 6-chome, Taihaku-ku, Sendai-shi, Miyagi 982-8510 Japan. Defendant **NEC TOKIN America Inc.**, the American business arm of Defendant NEC TOKIN Corporation is a California corporation that is headquartered in this District at 2460 North First Street, Suite 220, San Jose, California. Defendants NEC TOKIN Corporation and NEC TOKIN America, Inc. are hereinafter jointly referred to as “**NEC.**”

24. For purposes of this complaint, the term “**KEMET**” will refer to the combination of Defendants KEMET and NEC unless there is a need to differentiate between the two entities. Defendant KEMET is one of the largest capacitor manufacturers in the world, manufacturing

1 tantalum, ceramic, aluminum, film, paper and electrolytic capacitors. KEMET claims to be the
 2 leading global manufacturer of a wide variety of capacitors. Specifically, KEMET claims to be the
 3 largest Tantalum Capacitor manufacturer in the world and with the acquisition of Defendant NEC,
 4 controls approximately 40% of the Tantalum Capacitor market. For fiscal year 2013, Defendant
 5 KEMET reported consolidated net sales of USD\$843 million. During the Class Period, Defendant
 6 KEMET manufactured, marketed, sold and distributed Aluminum Capacitors and/or Tantalum
 7 Capacitors to purchasers throughout the United States, and in the State of California.

8 **2. Panasonic Defendants**

9 25. Defendant **Panasonic Corporation** is a Japanese corporation with its headquarters
 10 at 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 Japan. Defendant **Panasonic Corporation**
 11 **of North America** is a Delaware corporation with its headquarters at Two Riverfront Plaza,
 12 Newark, New Jersey. Defendant Panasonic Corporation of North America is a subsidiary of
 13 Defendant Panasonic Corporation and is the American business arm of Panasonic. Defendants
 14 Panasonic Corporation and Panasonic Corporation of North America are hereinafter jointly
 15 referred to as “**Panasonic.**” Panasonic is one of the largest capacitor manufacturers in the world
 16 and manufactures many different types of capacitors, including tantalum capacitors, aluminum
 17 capacitors, supercapacitors and ceramic capacitors. Capacitors were originally manufactured by
 18 Panasonic Electronic Devices Co., Ltd. but that company was merged into Defendant Panasonic
 19 Corporation in or around April 1, 2012. Defendant Panasonic Corporation succeeds to the
 20 liabilities of Panasonic Electronic Devices Co., Ltd.

21 26. In 2009, Defendant Panasonic acquired Defendant **SANYO Electric Co., Ltd.**
 22 Defendant SANYO Electric Co., Ltd. and its subsidiaries became fully consolidated under
 23 Defendant Panasonic in December 2009. Defendant **SANYO Electronic Device (U.S.A.)**
 24 **Corporation** is a Delaware corporation with its headquarters at 2055 Sanyo Avenue, San Diego,
 25 California. Defendant SANYO Electronic Device (U.S.A.) Corporation is a wholly owned
 26 subsidiary of Defendant Electric Co., Ltd. Defendants SANYO Electric Co., Ltd. and Defendant
 27 SANYO Electronic Device (U.S.A.) Corporation are hereinafter jointly referred to as “**SANYO.**”

27. For purposes of this complaint, the term **“Panasonic”** will refer to the combination of Defendants Panasonic and SANYO unless there is a need to differentiate between the two entities. Defendant Panasonic is one of the dominant market leader in multiple different categories of capacitors, including Aluminum Capacitors and Tantalum Capacitors. During the Class Period, Defendant Panasonic was one of the largest manufacturers and sellers of Capacitors in the United States and globally. The manufacture and sale of capacitors at Panasonic falls under the Electronic Devices Sector of Defendant Panasonic, which has net sales in excess of ¥1 trillion. Defendant Panasonic is one of the largest market players in both the Aluminum Capacitor Market and the Tantalum Capacitor Market. During the Class Period, Defendant Panasonic manufactured, marketed, sold and distributed Aluminum Capacitors and/or Tantalum Capacitors to purchasers throughout the United States, and in the State of California.

3. Samsung Defendants

28. Defendant **Samsung Electronics Co., Ltd.** is a South Korean corporation with its global headquarters at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, South Korea. Defendant **Samsung Electronics America, Inc.** is a New York corporation with its headquarters at 105 Challenger Road, Ridgefield, New Jersey. Defendant Samsung Electronics America, Inc. is a wholly-owned subsidiary of Samsung Electronics Co., Ltd. and is a global leader in the global electronics market. Defendant **Samsung Electro-Mechanics** is a South Korean corporation with its headquarters at Gyeonggi-Do Suwon-Si Youngtong-Gu Maeyoung-Ro 150 (Maetan-Dong) 443-743, South Korea. Defendant Samsung Electro-Mechanics is a part of the global Samsung Group. Defendant **Samsung Electro-Mechanics America, Inc.** is a California corporation with its headquarters at 3333 Michelson Drive, Suite 500, Irvine, California. Defendant Samsung Electro-Mechanics America, Inc. is a subsidiary of Defendant Samsung Electro-Mechanics. Defendants Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., Samsung Electro-Mechanics and Samsung Electro-Mechanics America, Inc. are hereinafter jointly referred to as **“Samsung.”** During the Class Period, Defendant Samsung was one of the larger capacitor manufacturers and sellers in the world. During the Class Period, Defendant Samsung

1 manufactured, marketed, sold and distributed Aluminum Capacitors and/or Tantalum Capacitors to
 2 purchasers throughout the United States, and in the State of California.

3 **4. TDK Defendants**

4 29. Defendant **TDK Corporation** (“**TDK**”) is a Japanese corporation with its
 5 headquarters located at Shibaura Renasite Tower, 3-9-1 Shibaura, Minato-ku, Tokyo, Japan. In
 6 2008, Defendant TDK acquired EPCOS AG, a German electronic components manufacturer, one
 7 of the largest capacitor manufacturers in the world, and on October 1, 2009, merged EPCOS AG
 8 into a new entity, **TDK-EPC Corporation**. TDK-EPC Corporation is a TDK group company and
 9 is the manufacturer of TDK’s electronic components, modules and systems. Defendant TDK-EPC
 10 is headquartered in Tokyo, Japan. In fiscal year 2007, prior to the merger, EPCOS AG had sold its
 11 tantalum business units to Defendant KEMET. **TDK U.S.A. Corporation** is the headquarters of
 12 TDK Corporation’s operations in North and South America and is a New York corporation
 13 headquartered at 525 RXR Plaza, Uniondale, New York. **TDK Corporation of America** is
 14 responsible for the sale of electronic materials and components and power supplies and is a
 15 California corporation with its headquarters at 475 Half Day Road, Lincolnshire, Illinois.
 16 Defendant TDK is one of the largest capacitor manufacturers in the world. During the Class
 17 Period, Defendant TDK manufactured many different types of capacitors, including Aluminum
 18 Capacitors. Capacitor manufacturing and sales fell under the Industrial Equipment and Other
 19 sector of Defendant TDK. For fiscal year 2011, Defendant TDK reported net sales in that sector of
 20 approximately ¥226 billion. During the Class Period, Defendant TDK manufactured, marketed,
 21 sold and distributed Aluminum Capacitors and/or Tantalum Capacitors to purchasers throughout
 22 the United States, and in the State of California.

23 **5. Kyocera/AVX Defendants**

24 30. Defendant **Kyocera Corporation** (“**Kyocera**”) is a Japanese corporation
 25 headquartered at 6, Takeda Tobadono-cho, Fushimi-ku, Kyoto 612-8501, Japan. Defendant
 26 Kyocera’s capacitor business is operated mostly through Defendant **AVX Corporation** (“**AVX**”)
 27 which Defendant Kyocera acquired in 1990. Defendant Kyocera owns approximately 71% of
 28 Defendant AVX. Defendant AVX is a Delaware corporation with its headquarters at 1 AVX

Boulevard, Fountain Inn, South Carolina. According to Defendant Kyocera's filings with the Securities Exchange Commission ("SEC") on Form 20-F, "U.S. based AVX Corporation, our consolidated subsidiary, develops, manufactures and sells ceramic capacitors, tantalum capacitors and other passive components mainly used for information and communication equipment, industrial machinery and automobile. In early 2013, Defendant AVX acquired the Tantalum Component Division of Defendant Nichicon for approximately \$86 million. Defendant Kyocera reported overall net sales in 2013 of approximately ¥1.28 billion. During the Class Period, Defendants Kyocera/AVX manufactured, marketed, sold and distributed Aluminum Capacitors and/or Tantalum Capacitors to purchasers throughout the United States, and in the State of California.

6. Vishay Defendants

31. Defendant **Vishay Intertechnology, Inc. ("Vishay")** is a Delaware corporation with its headquarters located at 63 Lancaster Avenue, Malvern, Pennsylvania. Defendant Vishay is a major player in the semiconductor and passive components business. Capacitors form a large part of Defendant Vishay's passive components business. Vishay manufactures tantalum capacitors (both solid and wet), ceramic capacitors (both multilayer chip and disc), film capacitors, power capacitors, heavy-current capacitors and aluminum electrolytic capacitors. Vishay is a major player in both the Aluminum Capacitors and Tantalum Capacitors Markets. Capacitors constitute about 19% of Defendant Vishay's overall business. In 2008, Defendant Vishay acquired Defendant KEMET's wet tantalum capacitor business. Defendant Vishay is one of the largest capacitor manufacturers in the world and is particularly a leader in the tantalum capacitor market. For fiscal year 2013, Defendant Vishay's revenues from capacitor sales was approximately \$440 million. During the Class Period, Defendant Vishay manufactured, marketed, sold and distributed Aluminum Capacitors and/or Tantalum Capacitors to purchasers throughout the United States, and in the State of California.

7. Hitachi Defendants

32. Defendant **Hitachi AIC, Inc.** is a Japanese corporation with its headquarters at 1065 Kugeta, Moka-shi, Tochigi 〒 321-4521 Japan. Defendant Hitachi AIC, Inc. is the arm of the

business that manufactures capacitors and it is a wholly-owned subsidiary of **Hitachi Chemical Co., Ltd.**, a Japanese corporation with its headquarters at Grantokyo South Tower, 1-9-2, Marunouchi, Chiyoda-ku, Tokyo, 100-6606, Japan. Defendant Hitachi AIC manufactures tantalum capacitors, aluminum capacitors, film capacitors and ceramic capacitors. Defendant **Hitachi Chemical Company America, Ltd.** handles marketing and sales of products for the Hitachi corporate family in the United States. Defendant Hitachi Chemical Co., America, Ltd. is a New York corporation with its headquarters located within this District at 10080 North Wolfe Road, Suite SW3-200, Cupertino, California. Defendants Hitachi AIC, Inc., Hitachi Chemical Co., Ltd. and Hitachi Chemical Company America, Ltd. are hereinafter jointly referred to as “**Hitachi.**” Defendant Hitachi AIC, Inc. reported net sales for 2012 of ¥8.021 billion. During the Class Period, Defendant Hitachi manufactured, marketed, sold and distributed Aluminum Capacitors and/or Tantalum Capacitors to purchasers throughout the United States, and in the State of California.

8. ROHM Defendants

33. Defendant **ROHM Co., Ltd.** is a Japanese corporation with its headquarters 21 Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585 Japan. Defendant **ROHM Semiconductor U.S.A., LLC** is a Delaware limited liability company with its headquarters at 2323 Owen Street, Suite 150, Santa Clara, California. Defendant **ROHM U.S.A., Inc.** is a Delaware corporation headquartered at 6815 Flanders Drive, Suite 150, San Diego, California and is the American business arm of ROHM. Defendants ROHM Co., Ltd. and ROHM U.S.A., Inc. are hereinafter jointly referred to as “**ROHM.**” Defendant ROHM reports their capacitor business under the “Other” segment which had net sales of approximately USD\$556 million in 2013. During the Class Period, Defendant ROHM manufactured, marketed, sold and distributed Aluminum Capacitors and/or Tantalum Capacitors to purchasers throughout the United States, and in the State of California.

9. Nippon Chemi-Con Defendants

34. Defendant **Nippon Chemi-Con Corporation** is a Japanese corporation with its headquarters at 5-6-4, Osaki, Shinagawa-ku, Tokyo 141-8605, Japan. Defendant **United Chemi-Con, Inc.** is a wholly-owned subsidiary of Defendant Nippon Chemi-Con Corporation and was established in the United States in 1970. Defendant United Chemi-Con, Inc. is the largest

1 manufacturer and supplier of Aluminum Electrolytic Capacitors in North America, with more than
 2 8,000 unique product available. United Chemi-Con, Inc. has manufacturing and warehouse
 3 facilities in Brea, California and Lansing, North Carolina. Defendant United Chemi-Con, Inc. is an
 4 Illinois corporation with its headquarters at 9801 Whiggins Road, Rosemont, Illinois. Defendants
 5 Nippon Chemi-Con Corporation and United Chemi-Con, Inc. are hereinafter jointly referred to as
 6 **“Nippon Chemi-Con.”** Defendant Nippon Chemi-Co is one of the four dominant manufacturers
 7 in the Aluminum Capacitors Market. Capacitors is the largest operating segment of Defendant
 8 Nippon Chemi-Con. The Capacitors segment reported net sales in 2013 of approximately ¥88
 9 billion. During the Class Period, Defendant Nippon Chemi-Con manufactured, marketed, sold and
 10 distributed Aluminum Capacitors and/or Tantalum Capacitors to purchasers throughout the United
 11 States, and in the State of California.

12 **10. Nichicon Defendants**

13 35. Defendant **Nichicon Corporation** is a Japanese corporation with its headquarters
 14 at Karasumadori Oike-agaru, Nakagyo-ku, Kyoto 604-0845 Japan. Defendant **Nichicon**
 15 **(America) Corporation** is an Illinois corporation with its headquarters at 927 East State Parkway,
 16 Schaumburg, Illinois. Defendant Nichicon (America) Corporation is a subsidiary of Nichicon
 17 Corporation and is the American business arm of Nichicon. Defendants Nichicon Corporation and
 18 Nichicon (America) Corporation are hereinafter jointly referred to as **“Nichicon.”** Capacitors
 19 constitute the vast majority of the business of Defendant Nichicon. Defendant Nichicon is divided
 20 into three business sectors: (1) Capacitors for Electronics, (2) Capacitors for Circuit Boards, and
 21 (3) Capacitors for Electric Apparatus and Power Utilities. Capacitors for Electronics is the
 22 majority of the capacitor business, constituting 66% of their overall capacitor business. Defendant
 23 Nichicon is one of the four main players in the market for Aluminum Capacitors. Defendant
 24 Nichicon was also a major player in the Tantalum Capacitors Market until it sold its Tantalum
 25 Component Division to Defendant AVX in early 2013. For the fiscal year ending March 31, 2013,
 26 Nichicon reported net sales of approximately ¥90.8 billion. During the Class Period, Defendant
 27 Nichicon manufactured, marketed, sold and distributed Aluminum Capacitors and/or Tantalum
 28 Capacitors to purchasers throughout the United States, and in the State of California.

1 **11. Rubycon Defendants**

2 36. Defendant **Rubycon Corporation** is a Japanese corporation with its headquarters at
3 1938-1 Nishi-Minowa, Ina City, Nagano Prefecture, Japan. Defendant **Rubycon America Inc.** is
4 an Illinois corporation with its headquarters at 4293 Lee Avenue, Gurnee, Illinois. Defendant
5 Rubycon America Inc. is a subsidiary of Rubycon Corporation and is the American business arm
6 of Rubycon. Defendants Rubycon Corporation and Rubycon America Inc. are hereinafter jointly
7 referred to as “**Rubycon.**” During the Class Period, Defendant Rubycon manufactured, marketed,
8 sold and distributed Aluminum Capacitors and/or Tantalum Capacitors to purchasers throughout
9 the United States, and in the State of California.

10 **12. ELNA Defendants**

11 37. Defendant **ELNA Co., Ltd.** is a Japanese corporation with its headquarters located
12 at 3-8-11 Shin-Yokohama, Kohoku-ku, Yokohama, Kanagawa Prefecture, Japan. Defendant
13 **ELNA America, Inc.** is a California corporation with its headquarters at 970 W. 190th Street,
14 Suite 920, Torrance, California. Defendant Elna America, Inc. is a subsidiary of Defendant ELNA
15 CO., Ltd. and is the American business arm of ELNA. Defendants ELNA Co., Ltd. and ELNA
16 America, Inc. are hereinafter jointly referred to as “**ELNA.**” During the Class Period, Defendant
17 ELNA manufactured, marketed, sold and distributed Aluminum Capacitors and/or Tantalum
18 Capacitors to purchasers throughout the United States, and in the State of California.

19 **13. Toshin Kogyo Defendants**

20 38. Defendant **Toshin Kogyo Co., Ltd. (“Toshin Kogyo”)** is a Japanese corporation
21 with its headquarters located at Tsukasa Bldg., 2-15-4 Uchikanda Chiyoda-Ku, Tokyo, Japan.
22 During the Class Period, Defendant Toshin Kogyo manufactured, marketed, sold and distributed
23 Aluminum Capacitors and/or Tantalum Capacitors to purchasers throughout the United States, and
24 in the State of California.

25 **C. AGENTS, CO-CONSPIRATORS AND/OR JOINT VENTURERS**

26 39. Various persons and/or entities not named as Defendants in this complaint have
27 participated and are liable as agents, conspirators and/or joint venturers in the violations alleged
28

herein and have agreed to engage in the wrongdoing and have performed acts and/or made statements in furtherance of the wrongdoing. These other persons and/or entities have facilitated, adhered to, participated in, and/or communicated with others regarding the alleged conspiracy to fix, raise, maintain and stabilize the price of Capacitors, as well as the anticompetitive agreements entered into by the Defendants and third parties that have been used to suppress competition in the Capacitors Market. Plaintiff reserves the right to name any or all of these other persons and/or entities at a later date.

III. JURISDICTION AND VENUE

40. Plaintiff brings this action under Sections 4 and 16 of the Clayton Act, (15 U.S.C. §§ 15 and 26) against Defendants for injunctive and declaratory relief against Defendants in order to prevent the Defendants from further violating Section 1 of the Sherman Act, as alleged herein, 15 U.S.C. § 26.

41. This Court has jurisdiction over this case pursuant to 28 U.S.C. §§ 1331 and 1337 and by Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15(a) and 26. This Court also has jurisdiction over this case pursuant to 28 U.S.C. § 1332(d) as the amount in controversy for the Class exceeds \$5,000,000 and there are members of the Class that are citizens of a state different than Defendants. Furthermore, this Court has supplemental jurisdiction over the state law claims pursuant to 28 U.S.C. § 1367(a) since the state law claims are so related to the federal claims that they form part of the same case or controversy under Article III of the United States Constitution.

42. Venue is proper in this District pursuant to Sections 4 and 12 of the Clayton Act, 15 U.S.C. §§ 15(a) and 22, as well as pursuant to 28 U.S.C. § 1391(b), (c) and (d) because, during the Class Period, one or more Defendants resided in this District, all Defendants transacted business, were found in, or had agents in this District, and a substantial portion of the affected interstate trade and commerce described below has been carried out in this District.

43. The Northern District of California is the most appropriate venue for this action. First, many of the Defendants have sales offices in this District. A number of the Defendants have American subsidiaries that are headquartered in this District. Second, the DOJ's investigation into the conspiracy in the Aluminum Capacitors Market and Tantalum Capacitors Market is being

spearheaded by the San Francisco office of the DOJ. Upon information and belief, Plaintiff alleges that the DOJ has empaneled a grand jury to investigate anticompetitive conduct in the capacitors industry in the Northern District of California and that several subpoenas were issued to capacitor manufacturers at the beginning of 2014. As such, the Northern District of California is, by far, the best forum for this litigation.

44. This Court has personal jurisdiction over the Defendants because each of the Defendants has minimum contacts with this District such that the exercise of jurisdiction over the Defendants in this District would not offend traditional notions of fair play and substantial justice. The Defendants each (a) transacted business throughout the United States, including in this District; (b) participated in the sale and distribution of Capacitors throughout the United States, including in this District; (c) had substantial contacts with the United States, including in this District; and/or (d) was engaged in an anticompetitive conspiracy that was directed at and had the intended effect of causing injury to persons residing in, located in, or doing business throughout the United States, including in this District.

IV. RELEVANT MARKETS

45. This litigation involves the Aluminum Capacitors Market and the Tantalum Capacitors Markets. These markets are recognized throughout the industry and by the Defendants themselves who organize their manufacturing, marketing and sales around these markets. There is a Capacitor Market which covers all types of capacitors but there is a significant difference between the different types of capacitors, in terms of capacitance, form factors, size possibilities and functionality, that different capacitors are not readily interchangeable amongst different capacitor types. For example, Aluminum Capacitors have unique characteristics that make them distinct from Supercapacitors, which make them distinct from Tantalum Capacitors.

A. CAPACITOR MARKET

46. Capacitors are used to store electrical energy and are a vital component in almost every electrical and/or electronic device. Capacitors provide and regulate power to these devices and can provide energy to something as small as a calculator to something as large as a vehicle. This is distinct from a battery which provides an electrical charge to a circuit. The basic

1 fundamentals of a capacitors are that they have two plates which are separated by a non-conducting
2 substance, known as a dielectric. Aluminim foil can be used to make plates, as can tantalum
3 powder that has been shaped into pellets, as well as other metals. The range of substances that can
4 be used as the dielectric or non-conducting substance is broad but there are a few specific materials
5 that are commonly used as the dielectric or non-conductive substance. Those include ceramic,
6 mica, cellulose, porcelain, Mylar, Teflon and even air.

7 47. The dielectric has a significant impact on what kind of capacitor is created and
8 substantially defines what the capacitor is best suited for. Depending on the size and type of
9 dielectric, some capacitors are better for high frequency uses, while some are better for high
10 voltage applications. Capacitors can be manufactured to serve any purpose, from the smallest
11 capacitor for use in a calculator to a supercapacitor that can power a commuter bus.

12 48. Capacitors are measured by their capacitance, which is the ability of a capacitor to
13 store an electrical charge. Any object that can be electrically charged exhibits capacitance. The
14 International System of Units ("SI") has established the farad (symbol: F) as the measuring unit
15 for capacitance. Different types of capacitors have different ranges of capacitance. Therefore, the
16 purpose that the capacitor is being used for has a significant impact on the materials that are best
17 suited for that use.

18 49. Capacitors of different materials are not easily interchangeable since each material
19 has its own unique characteristics that make them best suited for different types of electronic
20 devices. For example, ceramic capacitors are the cheapest to manufacture and are based on the
21 oldest of technologies but they also generally have the lowest capacitance. Ceramic capacitors are
22 rarely used in more advanced electronic devices. On the other extreme, supercapacitors, also
23 known as ultracapacitors or electric double-layer capacitors ("EDLC"), are electrochemical
24 capacitors that are distinguishable from other capacitors in that they do not have a conventional
25 solid dielectric. Amongst capacitors, supercapacitors store the most energy per unit volume or
26 mass (energy density). Although supercapacitors generally have the highest capacitance values,
27 they are also amongst the largest capacitors and therefore are most commonly used in industrial

1 applications, energy applications and in automotives. Supercapacitors are therefore not easily
2 interchangeable with Aluminum Capacitors and Tantalum Capacitors.

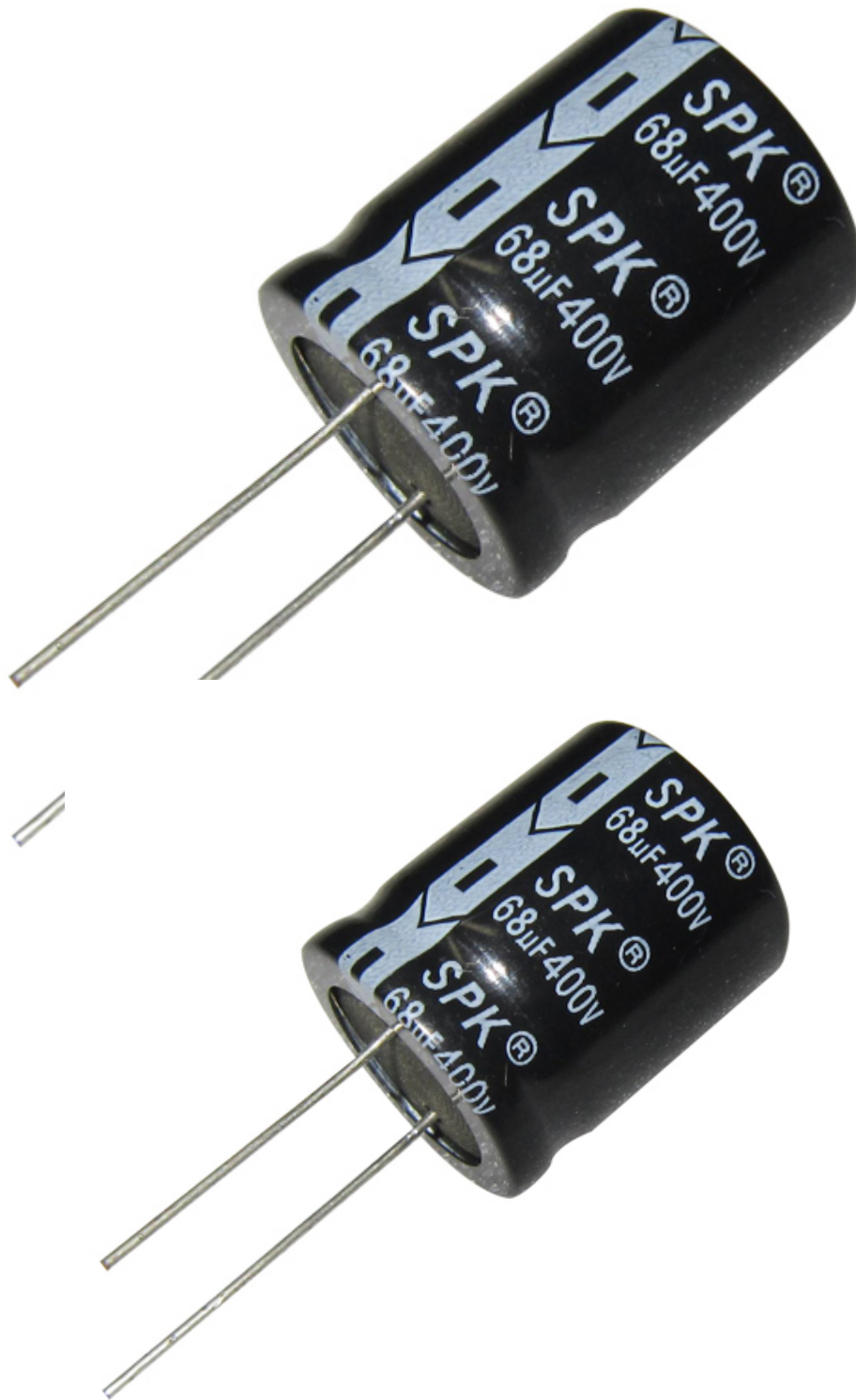
3 50. Aluminum Capacitors and Tantalum Capacitors are widely used capacitors in
4 modern electronic devices but even between these two types of capacitors, they are not readily
5 interchangeable. Aluminum Capacitors are generally more expensive to manufacture than ceramic
6 capacitors but have higher capacitance values and are commonly used in circuit boards in laptop
7 computers. Tantalum Capacitors are even more expensive to manufacture since they require the
8 use of the element tantalum, which is not as easy or as cheap to acquire as aluminum. Tantalum
9 Capacitors, however, have higher capacitance values at smaller sizes than Aluminum Capacitors.
10 Tantalum Capacitors are therefore well-suited for more modern electronic devices, such as
11 smartphones and tablets.

12 51. Capacitors can be distinguished between electrolytic and electrostatic capacitors.
13 Electrolytic capacitors are polarized, meaning that they have positive and negative leads that must
14 be positioned the correct way in an electric circuit (*i.e.*, the positive lead, the cathode, must go to
15 the positive side of the power source, and the negative lead, or anode, must go to the negative
16 side). On the contrary, electrostatic capacitors are not polarized (*i.e.* they do not have positive and
17 negative leads) and therefore can be installed in either direction with respect to the flow of current.
18 Historically, electrolytic capacitors have had higher capacitance values than electrostatic
19 capacitors. Different materials are commonly used for electrolytic capacitors versus electrostatic
20 capacitors.

21 52. In 2013, the global market for capacitors generated approximately \$18.25 billion in
22 global sales. In terms of sales by dollar value, the Aluminum Capacitor Market constitutes
23 approximately 23% of the overall Capacitors Market. Tantalum Capacitors constitute about 10%
24 of the overall Capacitors Market. There are other types of capacitors, such as supercapacitors (or
25 ultracapacitors), film capacitors and ceramic capacitors. These other types of capacitors that
26 constitute the remainder of the Capacitors Market include ceramic capacitors, supercapacitors and
27 film capacitors, none of which are easily interchangeable with Aluminum Capacitors and Tantalum
28 Capacitors.

B.

Capacitance is the ability of a capacitor to store an electric charge. The surface area of the capacitor allows for a larger dielectric to be attached to an external circuit. Aluminum electrolytic capacitors are typically in a cylindrical shape and look like:



54. Aluminum Capacitors have relatively high capacitance levels. Overall, Aluminum Capacitors can maintain higher capacitance levels at smaller sizes when compared to ceramic capacitors, which are the most commonly used type of capacitor. However, Aluminum Capacitors cannot match the volumetric efficiency of Tantalum Capacitors. Because of the nature of Aluminum Capacitors, the capacitance of Aluminum Capacitors can only increase by increasing

the surface area covered by the dielectric. This requires additional stacking and winding of the aluminum foil layers, which increases the physical size of the Aluminum Capacitor. Therefore, Aluminum Capacitors cannot be used in certain small devices that require high capacitance values. At a certain point, the Aluminum Capacitor becomes too physically large to be useful for electronic devices that demand high capacitance values.

55. There are a wide variety of uses for Aluminum Capacitors. Aluminum Capacitors are used extensively in traditional consumer electronic products, such as desktop computers and laptops. According to market research reports, with the shift towards energy saving and emission reduction, the market for Aluminum Capacitors is not only growing steadily in the field of traditional consumer electronics, but also in emerging fields, such as energy-saving lamps, inverters, new energy and rail transport. Aluminum Capacitors have reputation as being relatively inexpensive but rugged.

56. Aluminum Capacitors account for approximately 6.5% of the global capacitors market in terms of sales by volume. In terms of sales by dollar value, Aluminum Capacitors constitute approximately 23% of the global capacitors market.

57. The Aluminum Capacitors Market is highly centralized with only a few major manufacturers. Japanese manufacturers currently dominate the supply of global aluminum electrolytic capacitors, with 64% of the global market share. That 64% market share consists mostly of four corporations, Defendants Nippon, Nichicon, Rubycon and Panasonic. Taiwan-based companies control an additional 14% of the global Aluminum Capacitor market. Production of Aluminum Capacitors in the People's Republic of China has also grown rapidly over the last few years.

58. Aluminum Capacitors are a distinct and separate product market that can be differentiated not only from non-capacitors but also from other capacitors that are made of different materials. As discussed above, Aluminum Capacitors have unique form factors, physical size limitations and capacitance characteristics that make them distinguishable from other types of capacitors. European Union antitrust regulators, in reviewing the proposed mergers of TDK

Corporation/EPCOS AG and KEMET Corporation/NEC TOKIN Corporation recognized the Aluminum Capacitors market as a distinct and separate product market.

59. Demand for Aluminum Capacitors is relatively inelastic as it does not change significantly based on price. There are no adequate substitutes for Aluminum Capacitors for most applications. The market for Aluminum Capacitors is highly centralized and dominated by a few companies, which are Defendants in this action. Since the market is dominated by a few companies who control the lion's share of the Aluminum Capacitors Market, the continuing agreement, understanding, combination or conspiracy to fix, raise, stabilize and maintain the prices of aluminum electrolytic capacitors is effective at setting the prices of Aluminum Capacitors at artificially high, supra-competitive prices.

C. TANTALUM CAPACITORS MARKET

60. Tantalum Capacitors, like Aluminum Capacitors, are a type of electrolytic capacitor. Tantalum Capacitors typically consist of a pellet of tantalum metal as the anode (one of the plates), covered by an insulating oxide layer that forms the dielectric with an electrolytic solution or conductive solid as the cathode (the other plate). Tantalum is a chemical element on the periodic table with the symbol Ta. It is also a rare earth mineral. Tantalum is derived from tantalite, which is the raw material that is refined for tantalum. The major use for tantalum, as a metal powder, is in the production of electronic components, mainly Tantalum Capacitors. Tantalum Electrolytic Capacitors exploit the tendency of tantalum to form a protective oxide surface layer. Because the thin oxide dielectric layer can be very thin, a high capacitance can be achieved in a small volume. The term "volumetric efficiency" refers to the capacitance value that can be achieved given a certain volume. High volumetric efficiency means that a capacitor has a high capacitance value at smaller sizes.

61. Unlike Aluminum Capacitors, there is significantly more diversity in terms of form factors for Tantalum Capacitors. For example, there are Radial Tantalum Capacitors which have two radial pins that connect the capacitor to a circuit board. There are also Surface Mount Device ("SMD") Tantalum Capacitors which are shaped like rectangular boxes. The following is an example of a Radial Tantalum Capacitors:



62. Since Tantalum Capacitors are one of the largest uses for tantalum, the Defendants who manufacture, market and sell Tantalum Capacitors, have often claimed, during the Class Period, that shortages of tantalite ore or the high prices of tantalite ores are to blame for increases in the price of Tantalum Capacitors. These Defendants have often blamed longer lead times for Tantalum Capacitor production to these issues. Tantalite has been found in Australia, Congo, Brazil, Canada, Colombia, Egypt, northern Europe, Madagascar, Namibia, Nigeria, Rwanda, the United States (California, Colorado, Maine and Virginia) and Zimbabwe. Brazil has the world's largest reserve of tantalite. Historically, the majority of world tantalite production comes from Australia. The United Nations Security Council and the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act list columbite-tantalite as a conflict mineral because of the presence of large quantities of the mineral in the eastern Congo. Columbite-tantalite is used by various organizations to finance fighting in Africa.

63. Defendants represented to industry experts and analysts, as well as to consumers, that there were concerns with the supply of tantalum in 1997, 2000, 2008, 2011 and 2012, claiming that issues surrounding the purported closing of certain tantalum mines, the inability of certain tantalum mines to produce sufficient tantalum, and the inability to access sufficient tantalum due to the designation of tantalum as a "conflict mineral" under Section 1502 of the 2010 Dodd-Frank Wall Street Form and Consumer Protection Act ("Dodd-Frank") would affect the Defendants'

1 access to cheap tantalum, which thereafter would result in higher prices for Tantalum Capacitors.
2 Plaintiff alleges, upon information and belief, that these explanations did not provide the whole
3 story and helped conceal the illegal conspiracy entered into by the Defendants to fix, stabilize,
4 maintain and raise the price of Aluminum Capacitors and Tantalum Capacitors to inflated, supra-
5 competitive levels.

6 64. The Tantalum Capacitor distinguishes itself from other capacitors in having high
7 capacitance per volume and weight. Tantalum Capacitors have lower equivalent series resistance
8 (ESR), lower leakage, and higher operating temperature than other electrolytic capacitors. In other
9 words, tantalum capacitors have higher capacitances at smaller sizes.

10 65. Tantalum Capacitors are more expensive than other types of capacitors and
11 therefore are best used in applications and devices in which a small size capacitor is required that
12 can still maintain a high capacitance. In 2013, the average price per thousand units for Tantalum
13 Capacitors was \$106.18. Aluminum Capacitors, on the other hand, had an average price of \$38.12
14 per thousand units, while ceramic capacitors cost, on average, as little as \$6.57 per thousand units.
15 Due to the unique characteristics of Tantalum Capacitors, such as their volumetric efficiency, they
16 are often used in complex electronic devices in which high capacitance and small size are required,
17 such as mobile phones, smartphones, tablets and automotive electronics.

18 66. Tantalum Capacitor are susceptible to short-circuiting or catastrophic thermal
19 runaway failure and destruction by fire if subject to inconsistent voltage or voltage spikes, as such
20 inconsistencies can tax and eventually break down the Tantalum Capacitors' extremely thin
21 dielectric layer. However, despite this risk, Tantalum Capacitors are generally reliable and have
22 high resistance to leaking charge.

23 67. Tantalum Capacitors are a unique and distinct market because Tantalum Capacitors
24 are able to maintain high capacitance in smaller sizes and therefore are uniquely compatible for
25 small electronic devices that demand high capacitance values. For example, the high volumetric
26 efficiency of Tantalum Capacitors, in comparison to Aluminum Capacitors and Ceramic
27 Capacitors, means that Tantalum Capacitors are the best and only type of capacitor for certain
28 electronic device and circuit board designs. In addition, Tantalum Capacitors have lower

1 equivalent series resistance, which refers to the speed at which electric charge is released from the
2 capacitor, than Aluminum Capacitors of the same capacitance rating.

3 68. There are only a few major dominant players in the Tantalum Capacitors submarket
4 that control over 80% of the global market for Tantalum Capacitors. Defendant KEMET controls
5 approximately 35% of the Tantalum Capacitors submarket. Defendant AVX controls
6 approximately 25% of the global market for Tantalum Capacitors. Defendant Vishay controls
7 approximately 12% of the market, while Defendant Panasonic controls approximately 10% of the
8 global market for Tantalum Capacitors. The remaining portion of the Tantalum Capacitors Market
9 is controlled by Defendants Samsung, Hitachi, Nichicon and ROHM. In February of 2013, the
10 market shrank even more when Defendant AVX finalized the acquisition of the Tantalum
11 Component Division of Defendant Nichicon.

12 69. Tantalum Capacitors are a distinct and separate product market that can be
13 differentiated not only from non-capacitors but also from other capacitors that are made of
14 different materials. As discussed above, Tantalum Capacitors have unique capacitance and size
15 characteristics that make them distinguishable from other types of capacitors. Tantalum Capacitors
16 also require a specific material, tantalum, to manufacture, and therefore has cost and raw material
17 limitations that distinguish them from other types of capacitors. European Union antitrust
18 regulators, in reviewing the proposed mergers of TDK Corporation/EPCOS AG and KEMET
19 Corporation/NEC TOKIN Corporation recognized the Tantalum Capacitors market as a distinct
20 and separate product market.

21 70. Demand for Tantalum Capacitors is relatively inelastic as it does not change
22 significantly based on price. There are no adequate substitutes for Tantalum Capacitors for most
23 applications. Since the market is dominated by four companies who control the lion's share of the
24 Tantalum Capacitors Market, the continuing agreement, understanding, combination or conspiracy
25 to fix, raise, stabilize and maintain the prices of Tantalum Capacitors is effective at setting the
26 prices of Tantalum Capacitors at artificially high, supra-competitive prices.

D. CERAMIC CAPACITORS

71. Besides Aluminum Capacitors and Tantalum Capacitors, the other large portion of the overall Capacitors Market is ceramic capacitors. Ceramic capacitors are generally electrostatic capacitors and are distinguishable from Aluminum Capacitors and Tantalum Capacitors. Ceramic capacitors are a type of fixed value capacitor in which ceramic materials are used as the dielectric. Ceramic capacitors are constructed of two or more alternating layers of ceramic with metal acting as the anode and cathode. The ceramic dielectric generally consists of a mixture of finely ground granules or paraelectric or ferroelectric ceramic materials, modified by mixed oxides that impact the characteristics of the ceramic capacitor. The high level of plasticity of ceramic raw material enables manufacturers to produce ceramic capacitors of many different styles, shapes and dimensions. Modifying the thickness of the ceramic dielectric layer changes the capacitance of ceramic capacitors. However, because of the nature of ceramics, ceramic capacitors are not able to achieve the same volumetric efficiency as Aluminum Capacitors and Tantalum Capacitors.

72. Ceramic capacitors are relatively inexpensive capacitors that generally have low capacitance values. The composition of the ceramic material defines the electrical behavior of the capacitor and therefore affects the types of applications that the capacitor can be used in. Ceramic capacitors are generally divided into two application classes: (1) Class 1 ceramic capacitors offer high stability and low losses for use in resonant circuit applications; and (2) Class 2 ceramic capacitors offer high volumetric efficiency for buffer, by-pass and coupling applications.

73. The types of ceramic capacitors most often used in modern electronics are the multi-layer ceramic capacitor (“MLCC”) and the ceramic disc capacitor. MLCCs are the most produced capacitors with a quantity of approximately 1 trillion devices being manufactured a year. According to industry analysts, MLCC’s account for approximately 95% of the global ceramic capacitor market in terms of volume and approximately 94%. A MLCC capacitor, as its name suggests, is a capacitor which is manufactured with multiple layers of ceramic which serve as the dielectric which are alternated with metal objects which serve as the plates. This method, which is referred to as “stacking”, increases the capacitance of the ceramic capacitor because its surface area is increased by stacking up multiple layers of ceramic dielectric materials and metal electrode

1 materials. MLCC capacitors are frequently used in power management systems, including DC and
2 DC converter input and output filters. A ceramic disc capacitor is manufactured with a single
3 ceramic disc acting as the dielectric with another substance, generally metal, on either side, acting
4 as the anode and cathode. Ceramic disc capacitors are small devices and relatively cheap to
5 manufacture.

6 74. Ceramic capacitors are reliable and relatively cheap to manufacture but generally
7 lack the capacitance values and volumetric efficiency of Aluminum Capacitors and Tantalum
8 Capacitors. As a general rule, ceramic capacitors typically have smaller capacitance values when
9 compared to other capacitors and are therefore not as commonly used in applications with high
10 capacitance requirements. Although there has been substantial technological advancements in the
11 material sciences, particularly as it relates to MLCC's, ceramic capacitors are not substitutes for
12 Aluminum Capacitors and Tantalum Capacitors. For example, most circuit boards are designed to
13 use specific types of components, with specific technical and operational characteristics. This is
14 true of capacitors. In order to switch between different types of capacitors, the entire circuit board
15 would need to be redesigned and re-engineered. The substantial time, resources and cost necessary
16 to accomplish this makes it impracticable for consumers to switch between different types of
17 capacitors.

18 75. Nevertheless, the technological advancements in MLCC's has had an impact on the
19 demand for Aluminum Capacitors and Tantalum Capacitors over the long-run as electronic devices
20 are increasingly being designed in the future for MLCC's, as opposed to Aluminum Capacitors or
21 Tantalum Capacitors. The advancement of MLCC's is therefore at least partially responsible for
22 the stagnant and decreasing demand for Aluminum Capacitors and Tantalum Capacitors which has
23 been one of the primary motivations for the Defendants to engage in anticompetitive behavior in
24 those two relevant product markets. At its core, the fundamental goal of the conspiracy in the
25 Aluminum Capacitors Market and in the Tantalum Capacitors Market is to protect the profits of the
26 Defendants in a difficult market environment.

V. ANTITRUST CONDUCT

76. The Defendants engaged in a continuing and ongoing conspiracy to fix, maintain, manipulate and stabilize the price of Aluminum Capacitors and Tantalum Capacitors beginning at least as early as January 1, 2005 and continuing on to the present. This conspiracy was effectuated through illegal agreements to fix prices, through communications regarding pricing and output, through trade associations and through meetings between officers, directors, agents, employees and independent contractors of the Defendants. The Aluminum Capacitors Market and the Tantalum Capacitors Market are also highly susceptible to price-fixing since the barriers to entry into the market are extremely high. The Aluminum Capacitors Market has annual global sales of over \$4 billion, while the Tantalum Capacitors Market has annual global sales of over \$1.5 billion. Defendants are liable to Plaintiff and the Class for their illegal conspiracy to fix, raise, maintain and stabilize the price of Aluminum Capacitors and Tantalum Capacitors in the United States, as well as in the State of California.

A. **WORLDWIDE ANTITRUST REGULATORS INVESTIGATE PRICE-FIXING IN THE CAPACITORS MARKET**

77. The DOJ, along with many other antitrust regulators from around the world, including the People's Republic of China's NDRC, South Korea's Fair Trade Commission and Japan's Fair Trade Commission, have been conducting an extensive investigation into the Capacitor industry, particularly in regards to Aluminum Capacitors and Tantalum Capacitors. According to sources, Japan's FTC and European Union antitrust regulators have been very active in investigating price-fixing in the Capacitors Market. The existence of this massive antitrust investigation was confirmed by the DOJ to industry sources in April of 2014. However, those industry sources have also indicated that this global antitrust investigation began significantly in advance of that disclosure. The investigation is targeted at the pricing of capacitors, specifically the manipulation of capacitor pricing.

78. According to reports, antitrust regulators are jointly probing anti-competitive conduct amongst capacitor manufacturers. The investigation reportedly began in regards to capacitors used in automobiles but the investigation has now widened to cover the entire

Capacitors Market. The probe was also widening to include antitrust regulators from across the world. The United States DOJ investigative effort is originating out of the San Francisco office, which has spent the past decade investigating anti-competitive cartels in the computer parts industry that has led to millions of dollars in fines against manufacturers of memory, liquid crystal displays, optical disc drives and lithium-ion batteries. In many of these industries operate the same bad actors, corporate entities who have a history of engaging in anti-competitive conduct to ensure profits. Many of these corporate entities engaging in such conduct are repeat offenders, who either do not believe that American antitrust laws can be enforced against them, or believe that American antitrust fines, civil penalties and judgments are merely part of the cost of doing business, calculating that they will make more money from the conspiracy than they will eventually pay in fines, penalties, judgments and/or legal fees.

79. In March 2014, the NDRC raided the Chinese operations of several Japanese capacitor manufacturers. Taiyo Yuden Co., Ltd., one of the leading capacitor manufacturers in the world, is one of the companies that reportedly had their business operations raided in China by the NDRC. NEC TOKIN, a subsidiary of Defendant KEMET, one of the four dominant manufacturers in the Tantalum Capacitors Market, was also amongst the companies that was raided by China's NDRC. Both Defendant KEMET (via their subsidiary NEC TOKIN) and Taiyo Yuden Co., Ltd. have acknowledged that they are cooperating with authorities. Taiyo Yuden Co., Ltd. is a major manufacturer of ceramic capacitors and is also a manufacturer of supercapacitors but is not presently named as a Defendant in this action because Plaintiff, upon information and belief, does not believe that Taiyo Yuden Co., Ltd. manufactures Aluminum Capacitors or Tantalum Capacitors.

80. In May 2014, the South Korean FTC visited the Korean facilities of Defendant Panasonic. According to press reports, a Japanese corporation has applied to the United States DOJ's amnesty program, which grants leniency to a conspirator that reports violations of American antitrust laws and fully cooperates in investigating and prosecuting that conspiracy. According to a May 27, 2014 article, a Japanese "whistleblower" approached antitrust regulators in the United States and China with information regarding a price-fixing conspiracy in the entire worldwide

capacitor industry. Defendant Panasonic is believed to be the “whistleblower.” The investigations are increasing in intensity and are spreading worldwide, as further information is uncovered revealing the existence of a conspiracy to fix the price of Aluminum Capacitors and Tantalum Capacitors. In both markets, Defendant Panasonic is amongst the top 5 manufacturers.

81. The United States Antitrust Criminal Penalty Enhancement and Reform Act (“ACPERA”) provides leniency from antitrust prosecution and a reduction in civil penalties for those participants in an antitrust conspiracy that self-report their involvement. However, in order to obtain those leniency benefits, under DOJ rules, the self-reporting party must admit to participation in a criminal antitrust violation. **Therefore, there is at least one self-admitted member of this worldwide conspiracy.**

82. In June 2014, the Japanese FTC conducted on-site inspections at nine electronics parts makers on suspicion that the companies had formed a price cartel for the sale of capacitors for various electronic devices. Inspections were performed at the facilities of Defendants Panasonic (as well as its subsidiary SANYO), Nippon, Hitachi, NEC TOKIN (a subsidiary of Defendant KEMET), and Nichicon. According to sources, there is information showing that these companies made an agreement over the timing and size of product price increases for two kinds of capacitors, Aluminum Capacitors and Tantalum Capacitors, and thereby restricted competition over the last several years in those two markets.

83. The Aluminum Capacitors and Tantalum Capacitors Markets are amongst the two most centralized portions of the overall Capacitors Market, with four companies dominating the entire Tantalum Capacitors Market and with four Japanese corporations controlling the lion’s share of the Aluminum Capacitors Market. These companies are also geographically centralized, making price-fixing easy to accomplish. The nine companies under investigation are believed to have secured illegal and unlawful profits by uniformly passing the increases in material procurement costs through to product prices, citing shrinking demand after the collapse of Lehman Brothers in 2008, as well as the rising costs of aluminum and tantalum after the 2008 economic crisis.

1 84. Figures from the Japanese Ministry of Economy, Trade and Industry puts the
2 production volume of capacitors in Japan in 2013 at about ¥440 billion. Aluminum electrolytic
3 capacitors and tantalum electrolytic capacitors account for around ¥130 billion. According to
4 sources within the Japanese FTC, global demand for these two types of capacitors peaked over the
5 last few years. These two markets were also dominated by a few manufacturers, located almost
6 exclusively in Japan, with a few in other countries, such as the United States. According to the
7 Japanese FTC, these economic factors were major contributing factors to the formation of a cartel,
8 and the Japanese FTC is apparently planning to question people involved in the manufacturing,
9 marketing and sale of aluminum electrolytic capacitors and tantalum electrolytic capacitors in
10 Japan.

11 85. A representative for Defendant Nippon Chemi-Con commented, "It's true that we
12 have been inspected. We want to respond sincerely." Defendants TYC has confirmed that it was
13 raided by the NDRC and that it is cooperating with global antitrust investigators. Defendant NEC
14 TOKIN has also confirmed that it was raided by the NDRC and that it, too, is cooperating with
15 global antitrust investigators. Other companies, including Defendant Panasonic and Defendant
16 Toshin Kogyo have also admitted that they have been contacted by and are being investigated by
17 antitrust regulators, including the Japanese FTC.

18 86. In July 2014, the Chinese NDRC confirmed its investigation into the Capacitors
19 Market. The NDRC confirmed its investigation through a report published in the China Price
20 Supervision and Antitrust Journal, written by Xu Kunlin, Director-General of the NDRC's Price
21 Supervision and Antimonopoly Bureau. In the report, Mr. Xu stated that, in March 2014, one
22 Japanese capacitor manufacturer self-reported its participation in a global antitrust cartel in the
23 capacitor industry. According to Mr. Xu, this self-reporting capacitor manufacturer admitted that
24 there were regular conferences to exchange market information regarding capacitors. Media and
25 industry sources have indicated that this Japanese capacitor manufacturer will receive complete
26 leniency from the Chinese NDRC for providing this information.

27 87. The Policy and Regulatory Report, which provides information on newsworthy
28 events in competition law, issued a special report about an antitrust conference held in Beijing

from May 21, 2014 to May 23, 2014. In that report, an article by Lisha Zhou noted that Mr. Xu had stated that the NDRC's investigation into the electronics capacitors industry was almost complete. Mr. Xu went on to state that the NDRC had concluded two rounds of interviews and inquiries into the target companies.

B. STRUCTURE OF THE CAPACITORS MARKET FAVORS CONSPIRACY

88. During the Class Period, the nature of the Capacitors market allowed the Defendants and their co-conspirators to engage in a worldwide conspiracy to fix, raise, maintain and stabilize the price of Capacitors. There were numerous factors that favored the creation and maintenance of this price-fixing conspiracy, including but not limited to: (1) market concentration, (2) declining demand for Aluminum Capacitors and Tantalum Capacitors, (3) significant barriers to entry, (4) common trade associations and business organizations within the industry, (5) the interchangeability and commodization, and (5) inelastic demand for Aluminum Capacitors and Tantalum Capacitors.

89. In the United States, there are three primary groups who purchase Aluminum Capacitors and Tantalum Capacitors directly from the Defendants. The first group is Original Equipment Manufacturers ("OEMs") who install capacitors directly into their products. The second group is Electronic Manufacturing Service ("EMS") Providers who manufacture circuit boards and other electric circuit products that are later integrated into end-use products manufactured by others. The third group is third-party electronics distributors that serve primarily as middle men for electronic components. These third-party electronics distributors purchase capacitors from the Defendants and resell then to consumers, such as Plaintiff and other members of the first-level indirect purchaser class.

1. Market Concentration

90. The market for Capacitors is large. In 2013, global sales for capacitors exceeded \$18.25 billion. There are trillions of capacitors shipped every year. Aluminum Capacitors and Tantalum Capacitors remain a significant part of the Capacitors Market. For 2014, global sales of Aluminum Capacitors and Tantalum Capacitors are expected to exceed \$5.5 billion. Industry analysts note that, for North and South America, Aluminum Capacitors and Tantalum Capacitors

1 constitute approximately 31% of the total capacitor consumption on those two continents, with a
2 value of approximately \$680 million.

3 91. Defendant Vishay, which controls approximately 15% of the Tantalum Capacitors
4 Market, reported revenues from capacitor sales for fiscal year 2013 of approximately \$440 million.
5 Defendant KEMET, the largest tantalum capacitors manufacturer in the world, with control over
6 approximately 35% of the Tantalum Capacitors Market, reported overall net revenues in 2013 of
7 approximately \$843 million.

8 92. The Capacitors Market is highly concentrated and dominated by a few small group
9 of supplies. This is especially true in the Aluminum Capacitors Market and the Tantalum
10 Capacitors Market. This concentrated market is conducive to and facilitates the collusive conduct
11 alleged herein. The Tantalum Capacitors Market and the Aluminum Capacitors Market are the two
12 most centralized parts of the overall Capacitors Market. Defendants KEMET, AVX, Vishay,
13 Panasonic and Nichicon jointly controlling over 90% of the Tantalum Capacitors Market. In the
14 Aluminum Capacitors Market, four Japanese corporations, Defendants Nippon, Nichicon, Rubycon
15 and Panasonic control approximately 65% of the Aluminum Capacitors Market. These four
16 Japanese corporations, however, form the core of a larger conspiracy. Due to their market
17 dominance, any other corporate player in the Aluminum Capacitors Market must follow the lead of
18 the Big Four Japanese corporations. According to industry data, the 13 largest manufacturers of
19 Aluminum Capacitors account for approximately 92% of the Aluminum Capacitors Markets'
20 current revenue.

21 93. In early 2012, Defendant KEMET announced that it intended to acquire NEC
22 TOKIN. Defendant KEMET, already one of the largest tantalum capacitor manufacturers in the
23 world, when combined with NEC TOKIN, would dominate the Tantalum Capacitors submarket.
24 The Tantalum Capacitors submarket, even before the acquisition was highly centralized and
25 dominated by only a few corporate entities. Defendant KEMET already had a history of using
26 acquisitions to grow its market dominance in the capacitors market. In 2003, Defendant KEMET
27 began expanding operations into China, opening a manufacturing facility in Suzhou, China. In
28 2007, Defendant KEMET acquired the tantalum business unit of EPCOS AG, which was soon

acquired by Defendant TDK, another major capacitor manufacturer. Defendant TDK is based out of Japan. In 2008, Defendant KEMET sold its wet tantalum business to Defendant Vishay, another one of the few dominant tantalum capacitor manufacturers in the world. That same year, Defendant KEMET acquired Evox Rifa Group Oyj, a Finnish capacitors manufacturer, and Arcotronics Italia S.p.A., an Italian capacitors manufacturer. With these two acquisitions, Defendant KEMET solidified its dominant position in the Capacitors market. In 2012, Defendant KEMET acquired Cornell Dubilier Foil, LLC and Niotan Incorporated, which allowed the company to vertically integrated its manufacturing processes within Defendant KEMET's Film and Electrolytic Business Group and its Tantalum Business Group.

94. The combination of Defendant KEMET and NEC TOKIN resulted in a single corporation controlling approximately 35% of the Tantalum Capacitors submarket. Along with Defendants AVX, Vishay, Panasonic and Nichicon, Defendant KEMET is easily the single largest manufacturer in the Tantalum Capacitors submarket, and thereby dominates the market.

95. Overall, the Aluminum Capacitors Market and the Tantalum Capacitors Market are highly centralized with only a few major manufacturers, most of which are geographically centralized in a few Asian countries, with Defendants KEMET and Vishay, two American corporations, being the rare non-Asian corporations involved in these two markets. Due to the small market share that remains to those outside the conspiracy, there is no reasonable threat that manufacturers who are not part of the illegal antitrust conspiracy could successfully compete in the Aluminum Capacitors Market or the Tantalum Capacitors Market. Any new entrant who attempted to compete outside of the conspiracy could be easily eliminated either through concerted price reductions or due to the inability of a new entrant to sell sufficient Aluminum Capacitors or Tantalum Capacitors to survive as a legitimate competitor.

2. Stagnant and/or Declining Demand for Aluminum and Tantalum Capacitors

96. Demand in the Capacitors Market, particularly in the Aluminum Capacitors and Tantalum Capacitors Markets, has been a strong motivating factor in the creation of an antitrust cartel in the Aluminum Capacitors and Tantalum Capacitors Markets.

1 97. Generally, because capacitors are such an integral part of electronic devices,
2 demand for capacitors is largely tied to the demand for consumer electronics. The demand for
3 consumer electronics has increased significantly over the last few years. However, technological
4 changes have impacted the demand for different types of capacitors.

5 98. For example, the computer end-use market segment has historically accounted for a
6 significant portion of global capacitor consumption. Specifically, desktop computers have been a
7 major use for Aluminum Capacitors and Tantalum Capacitors. According to industry data,
8 Aluminum Capacitors and Tantalum Capacitors have derived close to 50% of their revenues from
9 the computer end-use market. Recently, there has been decrease in demand for all types of
10 computers in favor of smaller consumer electronics, such as smartphones and tablets. This has
11 resulted in a general decline in demand for Aluminum Capacitors and Tantalum Capacitors. In
12 addition, Aluminum Capacitors historically have been used extensively in audio-video equipment.
13 Again, the growth of smaller consumer electronic devices, such as portable music devices, has
14 reduced the demand for older audio-video equipment. This has also negatively impacted the
15 demand for Aluminum Capacitors since the early 2000s.

16 99. Demand for Aluminum Capacitors has also been impacted significantly by the
17 recent shift towards smaller consumer electronic devices, thanks in large part to technological
18 advances that have allowed manufacturers to miniaturize their products. These include portable
19 music players, smartphones and tablets. As small as these devices are, however, they still have
20 high capacitance needs. As discussed above, the only way to increase the capacitance of
21 Aluminum Capacitors is to add more layers of aluminum, which increases the physical size of the
22 product. Therefore, as a matter of physical nature and science, Aluminum Capacitors have not
23 been able to adapt as well as other capacitors to this shift in demand. Historically, consumer
24 electronic devices had been larger in size and required less capacitance, making Aluminum
25 Capacitors an excellent choice for many older products.

26 100. There is also a distinct difference in quality between the Aluminum Capacitors
27 manufactured by Japanese manufacturers and the Aluminum Capacitors manufactured by
28 manufacturers in Taiwan and the People's Republic of China. The higher quality of the Aluminum

1 Capacitors manufactured by the Japanese manufacturers, at one point, allowed them to charge
2 higher prices for the products. This was particularly important for the United States market, which
3 required the highest quality Aluminum Capacitors for their electronic devices. Low quality
4 Aluminum Capacitors not only can fail to work, but can also damage or even destroy the electronic
5 device that is contained within. Historically, low quality Aluminum Capacitors either had bad
6 sealing or used a bad electrolyte, which can lead to leaking or even an electrolyte exploding.

7 101. However, over the years, the improving manufacturing techniques of Taiwanese and
8 Chinese Aluminum Capacitor manufacturers reduced the quality differences between
9 manufacturers from the different countries. This has impacted the ability of the Japanese
10 manufacturers to maintain higher prices on quality alone.

11 102. Second, in the aftermath of the 2007-2008 economic crisis triggered by subprime
12 mortgage loan failures, highlighted by the bankruptcy of Lehman Brothers, purchasers of
13 Aluminum Capacitors focused more intently on price in regards to their Aluminum Capacitors.

14 103. These two factors influenced the cartel in the Aluminum Capacitors Market as the
15 Japanese manufacturers were eager to defend their profits and position in the Aluminum
16 Capacitors Market. Spearheaded by the Japanese manufacturers, the Defendants intensified their
17 anticompetitive conduct in order to ensure that all of the Defendants would be able to protect their
18 profit margins in a market environment that was confronted with not only overall declining
19 demand for Aluminum Capacitors, but also shifting supply and demand characteristics.

20 104. Demand for Tantalum Capacitors has also shown signs of decline but for somewhat
21 different reasons than Aluminum Capacitors. Tantalum Capacitors, unlike Aluminum Capacitors,
22 can have high capacitance values at smaller sizes. However, Tantalum Capacitors are one of the
23 more expensive types of capacitors to manufacture, due to the fact that tantalum is not as
24 commonplace as ceramic and aluminum, but also due to the increased complexity of
25 manufacturing them. According to industry experts, there are over 70 steps required to
26 manufacture Tantalum Capacitors. Furthermore, the process of manufacturing Tantalum
27 Capacitors is completely different from other types of capacitors, making it almost impossible to
28 shift production towards or away from Tantalum Capacitors in response to market conditions. As

such, Tantalum Capacitors are used primarily in those products in which ceramic capacitors and Aluminum Capacitors will not suffice due to the specifications of the electronic device. As a general rule, both ceramic capacitors and Aluminum Capacitors are cheaper and easier to manufacture than Tantalum Capacitors.

105. However, because of these changes in demand for consumer electronics, the demand for Aluminum Capacitors has grown stagnant by 2004, and showed signs of decline by late 2007. Since 2004, consumption of Aluminum Capacitors has dropped from approximately 9.9% in terms of global volume to approximately 6.8% in 2014. During that same time period, consumption of Tantalum Capacitors, by global volume, has decreased from 2.5% in 2004 to 1.1% in 2014. In dollar figures, the value of Aluminum Capacitors sold has decreased from approximately 33% of the total global sales value in 2004, to approximately 23% in 2014. For Tantalum Capacitors, the dollar value of Tantalum Capacitors sold has decreased from approximately 13% of the total global sales value in 2004, to approximately 10% in 2014.

106. From 2008 to 2009, alone, industry data shows that global consumption for capacitors dropped nearly 10% globally. The economic stimuli packages that were passed throughout the United States, Europe and Asia helped stabilize demand for capacitors in the 2010 and 2011 time period, by global consumption for capacitors again fell in 2012 and 2013. From 2011 to 2012, global consumption fell approximately 7%. From 2012 to 2013, global consumption fell approximately 14%. At the end of 2008, global consumption of Aluminum Capacitors had declined approximately 14% from 2005. As of the present, global consumption of Aluminum Capacitors is 30% less than it was in 2005. For Tantalum Capacitors, global consumption has decreased 37% between 2005 and 2008. As of the present, global consumption of Tantalum Capacitors is 53% less than it was in 2005.

107. The decline in demand is reflected in the financial statements of the Defendants themselves. For example, in Defendant TYC's 2013 Annual Report, the company noted that "[t]he electronics industry, to which [TYC] belongs, has seen continued growth from the smartphone and tablet device markets. In contrast to this, the PC and television markets remain sluggish. **Overall this has caused weaker demand for electronic components.**" Defendant Nichicon, in its 2013

1 Annual Report stated that the company's 21.7% decrease in capacitor sales "is attributed to
2 declining demand for digital home electronics and inverter equipment." Defendant AVX stated in
3 its 2013 Annual Report that "[o]verall sales prices for our commodity component products
4 declined during 2013."

5 108. In 2014, the North and South American market for capacitors constituted
6 approximately 12% of the overall global market for capacitors. The total dollar value of the North
7 and South American markets for capacitors in 2014 was approximately \$2.2 billion. In North and
8 South America, Aluminum Capacitors constitute approximately 17% of the total capacitor
9 consumption, while Tantalum Capacitors constitute approximately 14%.

10 109. In most cases, static or declining demand in a mature industry is likely to lead to an
11 antitrust conspiracy in order to ensure continuing profits by all Defendants. When there is static or
12 declining demand, Defendants can attempt to cannibalize each other by competing over price,
13 leading to thin profit margins. However, there is a stronger motivation for Defendants to agree to
14 fix, stabilize, maintain and raise prices to inflated, supra-competitive levels in order to ensure that
15 the Defendants can continue to reap huge profits from consumers and producers, even in the face
16 of static or declining demand.

17 110. Here, with overall demand for Aluminum Capacitors and Tantalum Capacitors
18 declining since the early 2000s, the Defendants were therefore highly motivated to enter into a
19 collusive and illegal agreement to fix the price of Aluminum Capacitors and Tantalum Capacitors.
20 The drive to maintain the cartel moving forward only intensified starting in late 2007 (when the
21 subprime economic crisis was in its early stages) through late 2008. The watershed moment in
22 2008 was the September 15, 2008 bankruptcy of Lehman Brothers, which sent a system shock
23 through the entire global economy, a system shock that was felt particularly hard by the
24 Defendants since the Aluminum Capacitors Market and Tantalum Capacitors Market were already
25 on shaky ground. Prior to that, the Defendants had already been engaging in anticompetitive
26 conduct to protect their profits in the capacitor industry. However, the massive economic shock in
27 2008 was severe enough to threaten the entire capacitor industry. According to antitrust

investigators, the systemic economic shocks of the subprime economic crisis drove the Defendants to increase their anticompetitive conduct.

3. High Barriers to Entry

111. The barriers to entry into the Aluminum Capacitors Market and the Tantalum Capacitors are incredibly high, making it difficult, if not impossible for a new entrant in these markets who could realistically compete with the Defendants and their cartel. The Aluminum Capacitors and Tantalum Capacitors Markets are both mature markets with companies who have spent tens of millions of dollars, if not more, in costs to build the infrastructure necessary to mass produce Aluminum Capacitors and Tantalum Capacitors. The Defendants have significant experience in the global capacitors industry and have the resources and institutional knowledge to succeed in the global capacitor market. The Defendants also have established reputations with both the sellers of raw materials needed to manufacture Aluminum Capacitors and Tantalum Capacitors, as well as with the purchasers and consumers of capacitive products.

112. These significant barriers to entry into the Aluminum Capacitors and Tantalum Capacitors Markets facilitated the illegal collusion and conspiracy. Those barriers to entry include: (a) established market positions of the incumbent Defendants, (b) collusive business culture amongst the Defendants who have long histories of being in the same industry, (c) substantial research and development costs, (d) development and maintenance of a robust distribution system, (e) development and maintenance of a global sales and marketing operation, (f) existing relationships with major purchasers and consumers of capacitors, (g) access to skilled and experience personnel with the knowledge to manufacture, market, distribute and sell Aluminum Capacitors and Tantalum Capacitors, (h) access to the technology and equipment necessary to successfully mass produce Aluminum Capacitors and Tantalum Capacitors of acceptable quality, and (i) access to the resources and money necessary to successfully mass produce Aluminum Capacitors and Tantalum Capacitors of acceptable quality.

113. Mass manufacturing Aluminum Capacitors and Tantalum Capacitors for the global market requires a huge commitment of time, resources and money. The Defendants have access to the financial resources and the capital necessary to bring online new fabrication operations and

1 facilities or to expand and/or retrofit existing facilities to meet market demand and adjust to
 2 technological changes. The Defendants also possess the skill, experience and resources to
 3 establish the complex supply chains needed to move sufficient resources to mass manufacture
 4 Aluminum Capacitors and Tantalum Capacitors, and the logistical chains needed to distribute
 5 millions of capacitors.

6 114. Beyond the substantial financial costs needed to build fabrication facilities and the
 7 financial costs needed to develop supply chains and distribution networks, any new market entrant
 8 would also need to create a diverse portfolio of products, since different electronic devices have
 9 different capacitive needs.

10 115. The Defendants also have established relationships with suppliers, and have often
 11 built vertically integrated networks that new entrants would not have access to. For example, in
 12 June 2011, Defendant KEMET acquired Cornell Dubilier Foil, LLC, a manufacture of foils utilized
 13 as a core component in electrolytic capacitors. In February 2012, Defendant KEMET acquired
 14 Niotan, Inc., a leading manufacturer of tantalum powder. Defendant KEMET has also recently
 15 announced a comprehensive plan for sourcing conflict-free tantalum from the Democratic Republic
 16 of Congo. New entrants would not have political relationships with countries like the Democratic
 17 Republic of Congo, an important source of tantalum, nor would they be vertically integrated such
 18 as to ensure that they have an adequate supply of the raw materials necessary to manufacture
 19 Aluminum Capacitors and Tantalum Capacitors at an appropriate price.

20 **4. Capacitors are Interchangeable Commodities**

21 116. Capacitors that have the same capacitance, dielectric, and form factor that are made
 22 from the same materials are interchangeable. Aluminum Capacitors made from one Defendant is
 23 interchangeable with the Aluminum Capacitors of another as long as they share the same
 24 capacitance, dielectric and form factor. As long as the Aluminum Capacitors share the same
 25 technical and operational specifications, they are interchangeable. The technology and knowledge
 26 needed to manufacture Aluminum Capacitors is available to all Defendants to manufacture
 27 Aluminum Capacitors of any capacitance, dielectric, and form factor. There is no restriction on the
 28 ability of Defendants to compete with other Defendants based on technological grounds. The only

1 restrictions are those that the Defendants have reached amongst themselves to artificially fix,
2 stabilize, maintain and raise the price of Aluminum Capacitors.

3 117. The same is true of Tantalum Capacitors. Tantalum Capacitors made from one
4 Defendant is interchangeable with the Tantalum Capacitors of another as long as they share the
5 same capacitance, dielectric and form factor. As long as the Tantalum Capacitors share the same
6 technical and operational specifications, they are interchangeable. The technology and knowledge
7 needed to manufacture Tantalum Capacitors is available to all Defendants to manufacture
8 Tantalum Capacitors of any capacitance, dielectric, and form factor. There is no restriction on the
9 ability of Defendants to compete with other Defendants based on technological grounds. The only
10 restrictions are those that the Defendants have reached amongst themselves to artificially fix,
11 stabilize, maintain and raise the price of Tantalum Capacitors.

12 118. Defendants know that these capacitors are interchangeable commodities and are
13 fungible. Indeed, Defendants have product cross-reference materials on their websites and in their
14 product catalogs that allow consumers to cross-reference their capacitors with the capacitors
15 manufactured by other Defendants. These cross-reference materials specifically identify a
16 Defendants' capacitor product by product number of technical and operational specification, and
17 identifies exactly what products manufactured by other Defendants are interchangeable with that
18 capacitor.

19 119. Aluminum Capacitors and Tantalum Capacitors are also commodities, meaning that
20 they are products which are relatively cheap and interchangeable and there are few to no other
21 means of competing with other manufacturers besides price. Aluminum Capacitors and Tantalum
22 Capacitors are mass-produced products are generally sold by Defendants in lots of 1,000.

23 120. It is easy to monitor an antitrust conspiracy over commodities like Aluminum
24 Capacitors and Tantalum Capacitors because price is an objective figure that can be easily
25 compared to the price of the same product manufactured by other Defendants. Price is also an
26 easily observable figure since the Defendants can agree to exchange price information or otherwise
27 obtain price information from other competitors or even purchasers and consumers, to ensure that
28 everyone in the cartel is complying with the terms of the agreement. In this case, the Defendants

1 were able to ensure that all of the members of the cartel were complying with the agreement by
 2 watching the prices charged by their purported competitors for Aluminum Capacitors and
 3 Tantalum Capacitors in the United States and in the State of California.

4 121. Because Aluminum Capacitors and Tantalum Capacitors are commoditized
 5 products, there is not much variation in the raw materials, resources and production expenses
 6 needed to manufacture them. Furthermore, most of the Defendants either have acquired companies
 7 that provide the raw materials or have established long-term relationships that allow them to obtain
 8 the necessary raw materials and consistent prices. Accordingly, the Defendants would know, both
 9 through communications between and amongst themselves, as well as knowledge of their own
 10 manufacturing costs, what other Defendants are spending to manufacture Aluminum Capacitors
 11 and Tantalum Capacitors. Since Defendants share similar, if not the same, costs, it is easy for the
 12 Defendants to conspire to fix, stabilize, maintain and raise the prices of Aluminum Capacitors and
 13 Tantalum Capacitors to supra-competitive levels, since all of the Defendants will be able to reap
 14 the same profit margins if they agree to a single noncompetitive, inflated price for Aluminum
 15 Capacitors and Tantalum Capacitors.

16 122. There is no technological or quality basis for competition amongst Defendants.
 17 Each of the Defendants have the ability and resources to manufacture Aluminum Capacitors and
 18 Tantalum Capacitors of any capacitance, dielectric or form factor to meet the demands of any
 19 purchaser or consumer of Aluminum Capacitors and Tantalum Capacitors. The only real means
 20 for Defendants to compete was by price. The Defendants, however, entered into a collusive and
 21 illegal conspiracy to unlawfully restrict and restrain competition by agreeing to avoid price
 22 competition.

23 **5. Inelastic Demand**

24 123. The demand for Aluminum Capacitors and Tantalum Capacitors is inelastic. In
 25 economic terms, inelastic demand refers to a situation in which the demand for a product is not
 26 significantly affected by price changes. In this case, inelastic demand refers to the fact that the
 27 demand for Aluminum Capacitors and Tantalum Capacitors did not decrease significantly in
 28 response to price increases by the Defendants. Inelastic demand is critical to an antitrust

1 conspiracy because the Defendants must be able to collusively raise prices throughout the product
2 market without suffering a significant drop in demand.

3 124. If there is a relatively available substitute for the product that is the subject of the
4 price-fixing conspiracy, then purchasers and consumers will simply abandon the product market
5 and the Defendants will have failed to increase their profits to the detriment of purchasers and
6 consumers. In this case, the demand for Aluminum Capacitors and Tantalum Capacitors is
7 inelastic. As discussed in detail above, capacitors serve a unique function on a circuit board in
8 storing an electrical current. There is no other product that can serve that same function.
9 Furthermore, amongst capacitors, each type of capacitor has unique characteristics that make them
10 best suited for certain applications. For example, Aluminum Capacitors cannot be easily replaced
11 with supercapacitors while Tantalum Capacitors cannot be easily replaced with ceramic capacitors.
12 Since most purchasers and users of capacitors have very specific demands regarding the
13 capacitance, form factors and dielectrics they need, changing types of capacitors would require a
14 substantial investment in redesigning or re-engineering a product, which is not feasible in most
15 cases.

16 125. In most electronic products and circuit boards, the capacitor is a relatively
17 inexpensive part of the overall electronic product or circuit board. When confronted with the
18 substantial costs and risks of redesigning or re-engineering their products versus paying the
19 inflated prices for Aluminum Capacitors and Tantalum Capacitors charged by Defendants,
20 purchasers and consumers invariably pay the inflated prices for these capacitors.

21 **C. DEFENDANTS CONSPIRED TO FIX, STABILIZE, MAINTAIN AND RAISE THE**
22 **PRICE OF ALUMINUM CAPACITORS AND TANTALUM CAPACITORS IN**
23 **VIOLATION OF ANTITRUST LAWS**

24 **1. Prices for Aluminum and Tantalum Capacitors Rose and/or Stabilized Instead**
25 **of Declined During the Class Period, Contrary to Market Reality**

26 126. The Defendants conspired to fix, stabilize, maintain and raise the price of
27 Aluminum Capacitors and Tantalum Capacitors. Based on the structure of the Aluminum
28 Capacitors Market and the Tantalum Capacitors Market, true competition would have resulted in
significant price declines in Aluminum Capacitors and Tantalum Capacitors as each of the

Defendants competed vigorously against each other for market share and sales. However, the reality of the market was and is inconsistent with fundamental economic principles for a market in which there was full and free competition. Industry data, in fact, shows that prices for Aluminum Capacitors and Tantalum Capacitors started to stabilize in 2005, when they should have been decreasing.

127. From 2005 to present, industry data shows that per unit prices for Aluminum Capacitors was relatively stable. In 2005, the average price per unit for Aluminum Capacitors was \$46.76 per thousand units. From 2005 to 2013, Aluminum Capacitors sold from between \$40.00 per thousand units to \$46.00 per thousand units. For Tantalum Capacitors, from 2005 to the present, industry data shows that the per unit prices for Tantalum Capacitors has increased approximately \$0.008, or \$8.82 per thousand units.

2. Defendants Entered into a Global Conspiracy to Fix the Prices of Aluminum and Tantalum Capacitors

128. Combined with the worldwide investigation of the capacitor industry and the centralization of the Aluminum Capacitors and Tantalum Capacitors Markets amongst a few dominant manufacturers, it is evident that the Defendants engaged in anticompetitive conduct to restrain competition in the Aluminum Capacitors and Tantalum Capacitors Markets.

129. Defendants agreed to operate as a cartel to foreclose competition and protect each of its members from price competition in a market involving a commoditized product and declining demand. By forming this cartel, Defendants inflated the prices of Aluminum Capacitors and Tantalum Capacitors to inflated, supra-competitive prices in order to reap the largest maximum profits possible, at the expense of purchasers and consumers, including Plaintiff and the members of the Class.

130. Defendants together entered into and engaged in an illegal, collusive agreement to concertedly fix, stabilize, maintain and raise prices of Aluminum Capacitors and Tantalum Capacitors and to reduce output for Aluminum Capacitors and Tantalum Capacitors. In both ways, the Defendants were able to maximize their profits, to the detriment of United States and California producers and consumers, and in a manner injurious to competition. This agreement was reached

certainly no later than January 1, 2005 through oral and written communications amongst the officers, directors, executives, sales managers, sales representatives, agents and employees of the Defendants. These communications occurred in person, through electronic or paper correspondence or via telephonic or video communications both before and during the Class Period.

3. Prices for Aluminum and Tantalum Capacitors Was Inconsistent With Raw Material Prices and Demand

131. The pricing of Aluminum Capacitors and Tantalum Capacitors during the Class Period was inconsistent with the costs of the raw materials necessary for the manufacture of those capacitors and was inconsistent with the demand for such products. Based on econometric analyses, Plaintiffs are able to ascertain that the prices of Aluminum Capacitors and Tantalum Capacitors were not based on arguably legitimate factors such as raw material costs and/or demand. As such, the price changes for Aluminum Capacitors and Tantalum Capacitors during the Class Period can only be explained as the byproduct of an illegal, antitrust conspiracy.

132. **First**, price insensitivity to costs is highly indicative of market power or anticompetitive activity. For-profit businesses that must compete make pricing decisions that are above the cost to manufacture the product (in order to make profit) but cannot be too high above the cost or else they would be undercut in pricing by a competitor, assuming that there is no antitrust conspiracy. This insensitivity can be seen as either periods when prices are flat despite changes in important costs, or periods when prices increase substantially despite there being no substantial change in demand factors or costs.

133. During the Class Period, capacitor industry pricing patterns did not follow cost variables. For example, for most of the Class Period, the price of tantalite ore was flat, even though the prices of Tantalum Capacitors were generally rising. As discussed above, tantalite ore is the main raw material used in producing Tantalum Capacitors as is, in fact, the major use for tantalite ore. Given these economic factors, the price of tantalite ore and tantalum should be consistent. When that pricing is inconsistent, that is strong evidence of the existence of an antitrust conspiracy in the Tantalum Capacitors Market.

1 134. **Second**, there is generally a strong relationship between price and demand in a
2 competitive market. Rising prices in the face of declining demand can be another indicator of
3 collusive actions or market power.

4 135. While capacitor types are not interchangeable in the short-term due to the unique
5 characteristics of each capacitor type, over a longer time horizon engineers can re-design products
6 so that they use more cost effective components. That is exactly what has been happening in the
7 capacitor industry. Demand for ceramic capacitors has increased significantly as designers
8 substituted away from more expensive and intermittently scarce Aluminum Capacitors and
9 Tantalum Capacitors and replaced them with cheaper ceramic capacitors.

10 136. Other factors have contributed to softening demand for capacitors in general, and
11 Aluminum Capacitors and Tantalum Capacitors specifically, during the Class Period. For
12 example, in late 2007 and 2008, the global economy crashed. Additionally, the consumer
13 preference for smartphones and tablet computers led to decreased demand for consumer audio and
14 visual equipment and notebook and desktop computers, electronic devices that as a general rule use
15 more capacitors and were more likely to use Aluminum Capacitors and Tantalum Capacitors. This
16 shift towards smartphones and tablet computers led to a net decrease in demand of capacitors.

17 137. Despite decreased demand during the Class Period, prices for capacitors,
18 particularly Aluminum Capacitors and Tantalum Capacitors, have not decreased proportionally.
19 Instead, the prices for capacitors have remained relatively stable or even increased. Despite
20 sharply diminishing demand for Aluminum Capacitors, Aluminum Capacitor prices decreased less
21 than they would have absent the conspiracy to stabilize prices and shield Defendants from the full
22 effects of diminished demand. Similarly, Tantalum Capacitor prices increased or stabilized during
23 the Class Period, despite the economic crisis and long-term diminishing demand for Tantalum
24 Capacitors.

25 **4. Defendants Voluntarily and Intentionally Conspired to Fix the Price of**
26 **Aluminum Capacitors and Tantalum Capacitors During the Class Period**

27 138. Conspiracies, by their nature, are self-concealing and it is often difficult to
28 determine the exact date when a conspiracy. Although the specific date upon which Defendants'

1 first entered into an illegal agreement to fix, stabilize, maintain and raise the price of Aluminum
 2 Capacitors and Tantalum Capacitors is not known to the Plaintiff, it is known to the Defendants.
 3 The conspiracy, however, certainly began no later than January 1, 2005.

4 139. Defendants voluntarily and intentionally entered into the conspiracy to fix, stabilize,
 5 maintain and raise the price of Aluminum Capacitors and Tantalum Capacitors. Defendants
 6 understood that their conspiracy would have an impact on the United States market for Aluminum
 7 Capacitors and Tantalum Capacitors, and the conspiracy in fact did affect the United States market
 8 for Aluminum Capacitors and Tantalum Capacitors. The Defendants were further aware and knew
 9 that their conduct would affect the commerce of all of the states of the United States, including in
 10 particular the State of California. Defendants voluntarily and intentionally entered into the
 11 conspiracy with the knowledge that their conduct would harm competition and commerce in the
 12 State of California.

13 **5. Various Methods Were Used by Defendants to Further the Conspiracy**

14 140. The conspiracy was implemented through several means. The Defendants fixed the
 15 price of Aluminum Capacitors and Tantalum Capacitors by entering into agreements to end price
 16 competition between and amongst themselves. Defendants also acted to fix the price of Aluminum
 17 Capacitors and Tantalum Capacitors by sharing confidential information, such as pricing
 18 information about their Aluminum Capacitors and Tantalum Capacitors between and amongst
 19 themselves. Defendants also shared information about their costs so that the Defendants each
 20 understood what the other Defendants needed for profitability. By sharing this confidential pricing
 21 information, the Defendants were able effectively determine and coordinate the pricing for
 22 Aluminum Capacitors and Tantalum Capacitors in an illegal, collusive manner.

23 141. In order to maintain their conspiracy, the members of the cartel regularly interacted
 24 and communicated with each other regarding different aspects of the conspiracy, such as pricing,
 25 output and market share. This was done in person, through electronic or paper correspondence or
 26 via telephone or video communications. These communications were done secretly in order to
 27 conceal the nature and extent of the conspiracy from purchasers and consumers of Aluminum
 28 Capacitors and Tantalum Capacitors, and from antitrust regulators.

1 142. Defendants were able to monitor compliance with the agreed upon pricing by
2 publishing pricing information and cross-reference materials that identified which Aluminum
3 Capacitor or Tantalum Capacitor manufactured by one Defendants could be interchanged with
4 which Aluminum Capacitor or Tantalum Capacitor manufactured by another Defendant. By
5 sharing this pricing information with the public and with the largest distributors of electronic
6 components, which includes capacitors, the Defendants would be able to ensure that all of the
7 Defendants complied with the agreed-upon price for Aluminum Capacitors and Tantalum
8 Capacitors.

9 143. Defendants also conspired regarding representations regarding the production lead
10 times for Aluminum Capacitors and Tantalum Capacitors. By extending the production lead times
11 for Aluminum Capacitors and Tantalum Capacitors, Defendants could ensure that demand for their
12 products remained high.

13 144. Defendants also conspired to reduce production and capacity during the Class
14 Period in order to create an artificial supply shortage, thus artificially inflating prices. For
15 example, there have been several capacitor plant closures reported in recent years. In 2008,
16 Defendant KEMET closed two European product facilities. In 2009, Defendant AVX closed its
17 flagship manufacturing plant in Paignton, United Kingdom along with a number of other smaller
18 plants. In 2010, Defendant Panasonic closed down a production facility in East Knox County,
19 Tennessee that used to produce 3 million capacitors a month. There is no pro-competitive
20 justification or explanation for these plant closures. These plant closures, viewed in conjunction
21 with the stable and rising prices of Aluminum Capacitors and Tantalum Capacitors during the
22 Class Period are demonstrative of a worldwide conspiracy to fix, stabilize and/or maintain the price
23 of Aluminum Capacitors and Tantalum Capacitors.

24 145. Defendants also agreed to restrain their output of Aluminum Capacitors and
25 Tantalum Capacitors in order to counter the actions of certain large purchasers of Aluminum
26 Capacitors and Tantalum Capacitors who would purchase large volumes of these products when
27 prices appeared to be low, in order to stockpile them. The practice of quoting similar production
28 lead times, and the practice of restricting output prevented certain purchasers from stockpiling

Aluminum Capacitors and Tantalum Capacitors, and requiring all consumers and purchasers of Aluminum Capacitors and Tantalum Capacitors to pay the inflated, supra-competitive prices set by the Defendants.

D. DEFENDANTS USE MERGERS AND ACQUISITIONS TO REDUCE THE NUMBER OF PLAYERS

146. The Defendants have all been involved in the Aluminum Capacitors and Tantalum Capacitors business together for many years, if not decades. The number of major manufacturers in the Aluminum Capacitors Market and the Tantalum Capacitors Market is small and are often geographically centralized. The Defendants have extensively used mergers to shrink the number of market players even further. This makes it easier for the illegal cartel to operate since there are fewer companies that need to be monitored.

1. Panasonic Acquires SANYO

147. In November of 2008, Defendant Panasonic announced its intention to acquire SANYO Electric Co., Ltd. Defendant Panasonic is one of the largest consumer electronics manufacturers in the world, and is also a dominant market player in both the Aluminum Capacitors Market and the Tantalum Capacitors Market. The acquisition of SANYO would only serve to further bolster Defendant Panasonic's dominance in those two markets. According to industry analysts at the time, the proposed acquisition would be valued in excess of \$110 billion. At the time of the acquisition, Panasonic's then president Fumio Ohtsubo told journalists that "[t]he harsh business environment makes it harder for us to attain the growth we were hoping for." In describing the SANYO Electric Co., Ltd. acquisition, Mr. Ohtsubo went on to say, "We could use a new pillar of growth."

148. Defendant Panasonic closed the acquisition in 2009, paying approximately \$4.6 billion to acquire a 50.2% stake in SANYO Electric Co., Ltd. In the early 2000s, SANYO Electric Co., Ltd. faced the serious risk of collapse but was saved by a huge capital infusion in 2006 by Goldman Sachs, Sumimoto Mitsui Banking Corporation and Daiwa Securities. Defendant Panasonic's acquisition required approval from its top shareholders but also had to pass through regulatory approval. On July 29, 2010, Defendant Panasonic announced plans to fully acquire two

of its subsidiaries, SANYO Electric Co., Ltd. and Panasonic Electric Works, for a total of \$9.4 billion. In October 2010, Defendant Panasonic acquired an additional 30% of SANYO Electric Co., Ltd. In March 2011, Defendant Panasonic finalized its acquisition of SANYO Electric Co., Ltd. through a “share exchange.” As of March 28, 2011, SANYO Electric Co., Ltd was officially delisted from the Tokyo Stock Exchange.

149. This merger had the effect of reducing competition in the Aluminum Capacitors and Tantalum Capacitors market, particularly in the Aluminum Capacitors Market. Prior to being acquired by Defendant Panasonic in 2009, SANYO Electric Co., Ltd. announced net sales from Electronic Devices of approximately ¥240 billion for the fiscal year ending March 31, 2009. Capacitors were part of the Electronic Devices segment of SANYO Electric Co., Ltd. For the fiscal year ending March 31, 2009, SANYO Electric Co., Ltd. reported overseas net sales of Electronic Components of approximately ¥90 billion. In its financial statement for the fiscal year March 31, 2009, SANYO Electric Co., Ltd. announced shrinking demand in the electronic components sector. In the financial statements for the fiscal year ending March 31, 2009, SANYO Electric Co., Ltd. stated that “[s]ales of semiconductors and electronic components drastically decreased due to the rapid fall in demand during the second half of the fiscal year and price declines of products in the electronic equipment markets; such as mobile phones, personal computers, TVs.”

150. This is indicative of the market conditions in the Capacitors Market prior to Defendant Panasonic’s acquisition of SANYO Electric Co., Ltd. In the face of shrinking demand, Defendant Panasonic acquired one of the other major market players in the Capacitors Market. This reduced competition in the market and made it easier for the Defendants to reach illegal agreements on pricing in the Aluminum Capacitors and Tantalum Capacitors Market, to share information about pricing, and to ensure that all members of the conspiracy complied with the illegal agreements.

2. KEMET Acquires NEC TOKIN

151. On March 12, 2012, Defendant KEMET announced its intention to acquire NEC TOKIN, which would consist of two parts. First, Defendant KEMET would acquire a controlling interest in NEC TOKIN, which would eventually translate into NEC TOKIN being completely

1 acquired by Defendant KEMET. According to media sources, Defendant KEMET would pay an
2 initial purchase price of \$50 million at the closing of the initial transaction in exchange for a 34%
3 economic interest and a 51% voting interest in NEC TOKIN. Defendant KEMET would make a
4 second \$50 million payment in or around August 31, 2014 in exchange for an additional 15%
5 economic interest in NEC TOKIN. The third and final payment by Defendant KEMET would
6 depend upon the operating results of NEC TOKIN at the time based on a multiple of six times
7 twelve months trailing Earnings Before Interest, Taxes, Depreciation and Amortization
8 (“EBITDA”) less the previous payments. Per Loof, the Chief Executive Officer of Defendant
9 KEMET stated that “[t]oday’s announcement is certainly the most dramatic change in the history
10 of our company, and possibly even in the Electronic Component Solutions industry.

11 152. Prior to this transaction, Defendant KEMET was already one of the largest
12 Tantalum Capacitor manufacturers in the world. NEC TOKIN was also one of the leading
13 manufacturers of Tantalum Capacitors. Combined, the merged company became the largest
14 Tantalum Capacitor manufacturer in the world.

15 153. Shigenori Oyama, the president of NEC TOKIN stated at the time of the transaction
16 that, “[t]his alliance will enable each company to complement each other in expanding their range
17 of products, sales territories and procurement of materials, and as a result, enhance our capabilities
18 to provide an extensive line-up of products which we hope will increase the satisfaction of our
19 customers.”

20 154. After the acquisition, Mr. Oyama remained as the president of NEC TOKIN while
21 Defendant KEMET would appoint a new board chairman. Although Defendant KEMET and NEC
22 TOKIN represented that this merger would improve efficiency, this acquisition was, in reality, part
23 of the overall antitrust conspiracy to ensure that the price of Aluminum Capacitors and Tantalum
24 Capacitors. With fewer competitors in the market, it became easier for the members of the cartel
25 to reach agreement on prices, in violation of the antitrust laws, and to ensure that all cartel
26 members complied with the illegal agreement.

1 **3. Defendants Reduce Competition in the Tantalum Capacitors Market Through**
 2 **Acquisitions**

3 155. Defendant Vishay reduced competition in the Tantalum Capacitors Market through
 4 a series of acquisition. In 1992, Vishay acquired Sprague Capacitors, one of the first Tantalum
 5 Capacitor manufacturers in the world. Robert C. Sprague, the founder of Sprague Capacitors,
 6 invented the Tantalum Capacitor during the Second World War. In 2001, Vishay acquired
 7 Tansitor Electronics, Inc. and Mallory, a North American Capacitor Company (“NACC”). These
 8 two companies were amongst the two leading manufacturers of wet tantalum electrolytic
 9 capacitors.

10 156. In 2005, Defendant KEMET acquired the tantalum division of EPCOS AG, which
 11 would later be acquired by and merged into Defendant TDK Corporation. Defendant KEMET
 12 acquired the tantalum division of EPCOS AG ostensibly to increase Defendant KEMET’s position
 13 in conductive polymer tantalum capacitors. That same year, Defendant Nichicon acquired the
 14 tantalum division of Defendant Panasonic. These two transactions further shrank the Tantalum
 15 Capacitor Market, reducing competition within this product market.

16 157. In 2007, Defendant KEMET acquired the coveted Towcester UK tantalum wet
 17 capacitor operations. A year later, Defendant Vishay acquired the Towcester UK tantalum wet
 18 capacitor operations from Defendant KEMET, further enhancing its dominant position in the
 19 Tantalum Capacitors Market. These transactions between Defendants are demonstrative of the
 20 anticompetitive conduct and illegal agreements engaged in by the Defendants.

21 158. In 2009, Defendant Panasonic returned to the Tantalum Capacitors Market when it
 22 acquired Defendant SANYO. That same year, HolyStone International acquired Defendant
 23 Hitachi’s tantalum capacitor manufacturing line.

24 159. In 2012, Defendant KEMET acquired Niotan, a capacitor grade tantalum metal
 25 powder produce in the United States. In 2012, Defendant KEMET initiated its acquisition of NEC
 26 TOKIN, Asia’s largest producer of Tantalum Capacitors. The 2012 acquisition of NEC TOKIN by
 27 Defendant KEMET, as discussed above, was probably the most significant corporate action in
 28 dramatically reducing the number of competitors in the Tantalum Capacitors Market.

1 160. In 2013, Defendant AVX acquired the Tantalum Component Division from
2 Defendant Nichicon. As discussed above, Defendant Nichicon's tantalum capacitor manufacturing
3 operations had originally been owned by Defendant Panasonic but were sold to Defendant
4 Nichicon in 2005, further reducing competition in the Tantalum Capacitors Market.

5 161. In 2014, Defendant Vishay announced it was acquiring the tantalum capacitor
6 manufacturing operations of Holystone International, which had acquired Hitachi's tantalum
7 capacitor manufacturing operations in 2009.

8 **E. DEFENDANTS CONSPIRE THROUGH TRADE ASSOCIATIONS AND**
9 **INDUSTRY ORGANIZATIONS**

10 162. The Defendants also conspired through trade associations that all of the Defendants
11 were part of. The primary trade association in the United States by which the Defendant capacitor
12 manufacturers operate through is the Electronic Components Industry Association ("ECIA").
13 Defendants AVX, KEMET, Panasonic, TDK, ROHM and Vishay are all members of the ECIA.
14 James Bruorton of Defendant KEMET and Joel Smejkal of Defendant Vishay are both directors of
15 ECIA.

16 163. ECIA describes its mission as promoting and improving the business environment
17 for the sale of electronic components by manufacturers, their sales representatives and distributors.
18 According to their own website, ECIA provides members with the ability to network, share
19 industry business processes guidelines and best practices, exchange technical standards, obtain
20 industry research and market statistics and to advocate and promote the overall industry. ECIA
21 states that its members are provided with access to "industry peers and executive networking" and
22 events where they can be "face-to-face with leaders of the authorized electronic components
23 industry."

24 164. These trade association meetings provide an excellent cover for meeting and
25 communicating about the pricing of Aluminum Capacitors and Tantalum Capacitors and to
26 conspire to fix, stabilize, maintain and raise the prices of Aluminum Capacitors and Tantalum
27 Capacitors to inflated, supra-competitive levels.

1 165. The ECIA also sets standards for different electronic components, including for
 2 Aluminum Capacitors and Tantalum Capacitors. Standard-setting committees serve as a
 3 mechanism by the Defendants for their conspiracy. ECIA refers to these as Engineering
 4 Committees which develop and maintain standards for the electronic components industry.
 5 Committees meet semi-annually during ECIA Engineering Spring and Fall Summits, and as
 6 needed. The Solid Electrolytic Capacitors standard-setting committee was working on standards
 7 for Tantalum Capacitors. The Solid Electrolytic Capacitors Engineering Committee was chaired
 8 by Jayson Young from Defendant KEMET.

9 166. ECIA holds accreditation rights through the American National Standards Institute
 10 (“ANSI”). Standards can be used as a method for maintaining an antitrust conspiracy by ensuring
 11 commonality amongst the Defendants’ products. Standards are also a means for excluding new
 12 market entrants and creating an additional barrier to entry. According to ECIA, the Components
 13 Council works in conjunction with the Standards Committees to develop guidelines, industry
 14 position papers, and white papers about the industry. ECIA’s website states that “[t]hrough a non-
 15 competitive, collaborative effort, the council will work to recognize common, global problems and
 16 issues within the electronics industry, then formally organize committees to address them and
 17 provide direction, guidance and benefit to everyone in the supply chain.” Although ECIA is
 18 ostensibly a trade association, it also serves as a cover for Defendants to collaborate in a non-
 19 competitive manner on matters other than setting standards, such as setting prices for
 20 interchangeable, commoditized products such as Aluminum Capacitors and Tantalum Capacitors.

21 167. The annual Electronic Distributor Show (“EDS”) and Conference is also an
 22 opportunity for the Defendants to meet face-to-face in furtherance of the conspiracy. The last EDS
 23 Conference was from May 5, 2014 to May 8, 2014 at The Cosmopolitan of Las Vegas in Las
 24 Vegas, Nevada. Representatives from many of the Defendants, such as Panasonic and AVX attend
 25 the EDS Conference. The next EDS Conference is scheduled for May 8, 2015 to May 11, 2014 at
 26 The Mirage in Las Vegas, Nevada. These conferences bring the top executives from Defendants to
 27 a single location where they can meet and communicate about their conspiratorial agreements,

1 make new agreements and ensure that agreements that have already been reached are being
2 followed.

3 168. The European Passive Components Industry Association (“EPCIA”) is also a trade
4 organization that Defendants utilize for meeting and communicating regarding their antitrust
5 conspiracy. Defendants Nichicon, AVX, Panasonic, Samsung, TDK, Vishay and Samsung are all
6 members of the EPCIA. EPCIA is part of the European Electronic Component Manufacturer
7 Association (“EECA”). Acknowledging the high risk of illegal anticompetitive conduct occurring
8 at EPCIA meetings, EPCIA has a Statement of Antitrust Policy. However, there is no enforcement
9 mechanism for this policy. Considering the fact that a major portion of the EPCIA membership
10 consists of members of the Aluminum Capacitors/Tantalum Capacitors conspiracy, this policy
11 merely serves as cover for the illegal coordination and cooperation that occurs at EPCIA meetings.

12 169. EPCIA claims that its mission is “[t]o represent and promote the common interests
13 of the Passive Components Manufacturers active in Europe to ensure and open and transparent
14 market for Passive Components in Europe as part of the global market place.”

15 170. EPCIA’s activities include: (1) monitoring all developments in legislation and
16 environmental regulations and taking necessary initiatives in response to such new developments,
17 (2) framing and publishing data relating to passive components, such as capacitors, to strengthen
18 visibility in the industry, (3) provide EPCIA members with general market data for the passive
19 components industry in Europe, as well as forecasts and “Management overviews” on economics,
20 markets, production values and labor forces in Europe, (4) facilitating the exchange of information
21 with neighboring component sectors such as semiconductors, electro-mechanics and printed circuit
22 boards, (5) organizing meetings and forums on important issues in the passive components
23 industry, (6) facilitating worldwide networking between passive component manufacturers at
24 expert/management level, (7) monitoring developments in trade agreements in order to support the
25 industry, (8) relating and communicating with similar industry associations in other regions around
26 the world; and (9) create links between equipment manufacture associations.

27 171. In Japan, Defendants KEMET-NEC TOKIN, Nippon Chemi-Con and Panasonic are
28 members of the Japan Electronics and Information Technology Industries Association (“JEITA”), a

Japanese trade association for the electronics and information technology industries. JEITA was established in 2000 through the merger of two other trade associations, the Electronic Industries Association of Japan (“EIAJ”) and the Japan Electronic Industries Development Association (“JEIDA”). JEITA’s directors include executives from Defendants KEMET-NEC TOKIN, Nippon Chemi-Con and Panasonic. All JEITA members gather annually for a conference that serves as the industry’s principal decision-making forum.

172. JEITA’s activities include “promoting international cooperation” and “implementing surveys and analyzing statistics.” Specifically, JEITA interacts with overseas trade associations by arranging and participating in international conferences and related events; releases industry-related information globally; collects, organizes, and analyzes statistics about the industry, publishes and distributes reports and reference materials on trends in, and analyses of, the industry, production forecasts, technological trends in a variety of fields, and mid- to long-range projections, and exchange statistics and information with trade associations in other countries.

173. JEITA, like the ECIA and the EPCIA serve as forums through which the Defendants can engage in anticompetitive behavior and reach illegal anticompetitive agreements, in violation of federal and California antitrust laws.

174. Furthermore, many of the Defendants are conglomerates that are involved in many different industries and in different parts of the electronics market. Executives and sales persons from the Defendants are members of overlapping organizations and have many opportunities to meet and collude on pricing. These organizations include the World Electronics Forum (“WEF”), the International Information Industry Conference (“IIIC”) and the World Semiconductor Council (“WSC”). All of these different organizations, including the ECIA, the EPCIA, and the JEITA serve as mechanisms and means for the Defendants to violate the antitrust laws of the United States and of the State of California.

175. There are also industry news sources that Defendants can use to monitor compliance with the conspiracy. For example, the Capacitor Industry News is an industry website that provides industry news as well as information about trends in the capacitor industry, as well as technical specifications about different types of capacitors being manufactured, including those

being manufactured by the Defendants. This exchange of information allows the Defendants to share information about their products and prices in order to both maintain the conspiracy but also to monitor the cartel members and ensure that all of them are complying with the terms of the illegal agreement.

VI. CAPACITORS ARE TRACEABLE THROUGH THE CHAIN OF DISTRIBUTION

176. Aluminum Capacitors and Tantalum Capacitors are component parts that are usually installed into electronic products by Original Equipment Manufacturers (“OEMs”) as part of the manufacturing process. Aluminum Capacitors and Tantalum Capacitors are also installed into electronic products to replace damaged, defective, or worn out capacitors. Tier One OEMs - the world’s largest electronic manufacturers, like Apple, HP, and IBM - directly purchase capacitors, including Aluminum Capacitors and Tantalum Capacitors, from the Defendants because they require capacitors in extremely large volumes. Other OEMs, such as smaller electronic device manufacturers and Silicon Valley startups, must indirectly purchase capacitors from distributors in the United States. In the United States, Aluminum Capacitors and Tantalum Capacitors are generally sold through the American subsidiaries or branch offices of the parent company manufacturer, or through distributors, some of which are authorized. These distributors typically market and sell these capacitors directly from the Defendants through the Internet or at physical store locations. Plaintiff and the proposed Class are purchasers of Aluminum Capacitors and Tantalum Capacitors from those persons and entities who acquire them directly from the Defendants.

177. Tier One purchasers are generally guaranteed the Aluminum Capacitors and Tantalum Capacitors that they require. Below the Tier One OEMs, there is a risk that smaller companies will not be able to obtain all of the capacitors that they need. This is particularly true in the Tantalum Capacitors Market. “Tier One OEMs such as Apple and HP will not have problems buying tantalum capacitors,” said Rick Pierson, senior analyst for researcher iSuppli. “Some Tier Two OEMs will get product, but the rest of the world will have a hard time.” Mr. Pierson suggests that buyers at smaller companies need to forge closer relationships with distributors, stating, “It’s

1 always good to have multiple suppliers, but the fact is it depends where you are in the pecking
2 order with that supplier or distributor.”

3 178. An Aluminum Capacitors or a Tantalum Capacitors can be sold as a stand-alone
4 product, or as a substantial part of a electronic product or device that contains capacitors. Plaintiff
5 and the proposed Class are suing on behalf of those purchasers who acquired Aluminum
6 Capacitors and Tantalum Capacitors as a stand-alone product. When an Aluminum Capacitors of
7 Tantalum Capacitors is sold as a stand-alone product, that capacitor is directly traceable to the
8 specific manufacturer. When an Aluminum Capacitor or Tantalum Capacitor is sold as part of an
9 electronic product or device, it is a distinct, physically discrete element of the finished product and
10 is identifiable by a specific, discrete part or model number that permits tracing. Capacitors are
11 traceable and identifiable throughout the chain of distribution, among other reasons, to ensure
12 consumer safety in the event of product recalls.

13 179. Global independent standards organizations have developed several standards for
14 electrical and safety testing intended to address a range of possible risks connected with Aluminum
15 Capacitors and Tantalum Capacitors. Marking standards that have been in place throughout the
16 Class Period require each Aluminum Capacitor and Tantalum Capacitor to be marked with the
17 manufacturer’s name, trade name, or trademark and model designation. Defendants’ Aluminum
18 Capacitors and Tantalum Capacitors are therefore identifiable throughout the chain of distribution
19 from factory to end purchaser.

20 **VII. CLASS ACTION ALLEGATIONS**

21 180. Plaintiff brings this class action individually and also on behalf and all others
22 similarly situated under Rule 23 of the Federal Rules of Civil Procedure, seeking monetary
23 damages, equitable and injunctive relief on behalf of the following California Class (the
24 “California Class”):

25 All persons or entities in the State of California that purchased or otherwise
26 acquired Aluminum Capacitors or Tantalum Capacitors that were manufactured
27 by Defendants or by one of their co-conspirators from January 1, 2005 through
28 the present (the “Class Period”) from a distributor or other person or entity who
purchased or otherwise acquired the Aluminum Capacitors or Tantalum
Capacitors directly from one of the Defendants or one of their co-conspirators.
Excluded from the California Class are Defendants and their employees, affiliates,

1 parents, subsidiaries, and co-conspirators, whether or not named in this
 2 Complaint, and the United States government.

3 181. Plaintiff also brings a nationwide class for injunctive relief under Rule 23 of the
 4 Federal Rules of Civil Procedure on behalf of the following Nationwide Class (the “Nationwide
 5 Class”):

6 All persons or entities in the United States that indirectly purchased or otherwise
 7 acquired Aluminum Capacitors or Tantalum Capacitors that were manufactured
 8 by Defendants or by one of their co-conspirators from January 1, 2005 through
 9 the present (the “Class Period”). Excluded from the Nationwide Class are
 Defendants and their employees, affiliates, parents, subsidiaries, and co-
 conspirators, whether or not named in this Complaint, and the United States
 government.

10 182. The California Class and the Nationwide Class are hereinafter jointly referred to as
 11 the “Class” except as to this situations in which there is a need to differentiate between the two,
 12 which will be noted in the complaint.

13 183. **Numerosity:** The worldwide market for Capacitors is over \$18.25 billion a year in
 14 global sales. Trillions of Capacitors are sold every year. Capacitors are part of almost every
 15 electrical or electronic device, ranging from consumer electronics such as smartphones and tablets
 16 to industrial machinery. In terms of sales by dollar value, Aluminum Capacitors constitute about
 17 23% of the total overall Capacitors Market. Tantalum Capacitors constitute about 10% of the
 18 overall Capacitors Market. Combined, the Aluminum Capacitors and Tantalum Capacitors
 19 generate over \$5 billion in annual sales. As such, Plaintiff believes that the number of purchasers
 20 of Aluminum Capacitors and Tantalum Capacitors in the United States numbers in the tens of
 21 thousands, if not more, and the number of consumers who acquire devices or products that contain
 22 Aluminum Capacitors and Tantalum Capacitors is in the hundreds of millions, if not more.
 23 California is the largest state in the United States and Plaintiff estimates that a sizeable portion of
 24 the purchasers of Aluminum Capacitors and Tantalum Capacitors in the United States are residents
 25 of the State of California. Plaintiff does not know the exact number and identities of these
 26 purchasers but their identities are presumably known by Defendants. The large number of
 27

potential class members and that fact that they are geographically dispersed makes joinder of all members impracticable.

184. **Common Questions of Law or Fact:** There are questions of law and fact that are common to all members of the Class, including but not limited to:

- a. Whether Defendants' unlawfully restrained trade and engaged in anticompetitive conduct in the Aluminum Capacitors Market and Tantalum Capacitors Market and charged supra-competitive prices in the Aluminum Capacitors Market and Tantalum Capacitors Market in violation of Section 1 of the Sherman Act;
- b. The identity of the participants in the conspiracy;
- c. The duration of the conspiracy;
- d. Whether the U.S. and/or California market for Aluminum Capacitors is a Relevant Market;
- e. Whether the U.S. and/or California market for Tantalum Capacitors is a Relevant Market;
- f. The nature and character of the acts and omissions by Defendants and their co-conspirators in furtherance of the antitrust conspiracy;
- g. Whether the conduct of Defendants, as alleged in this Complaint, caused injury to the business and property of Plaintiff and other members of the Class;
- h. The nature and extent of the inflated and supra-competitive pricing of Aluminum Capacitors and Tantalum Capacitors;
- i. The appropriate injunctive and equitable relief for the Class; and
- j. The appropriate measure of damages sustained by Plaintiff and the members of the Class.

185. **Typicality:** During the Class Period, Plaintiff purchased Aluminum Capacitors and Tantalum Capacitors that were manufactured by Defendants at supra-competitive prices from a distributor who directly purchased and/or acquired the Aluminum Capacitors and Tantalum Capacitors from the Defendants. Plaintiff's claims are typical of those the members of the Class. Plaintiffs' interests are coincident with and not antagonistic of the members of the Class.

1 186. **Fair and Adequate Representation of the Class:** Plaintiff's claims are typical of
 2 the claims of the other members of the Class and Plaintiff understands and is prepared to act in the
 3 best interests of the members of the Class as a class representative. Plaintiff will fairly and
 4 adequately protect the interests of the members of the Class. In addition, Plaintiff is represented by
 5 counsel who are highly skilled and experienced in the prosecution of antitrust cases and complex
 6 class actions. Plaintiff and their counsel are more than capable of fairly and adequately protecting
 7 the interests of the Class.

8 187. **Superiority of the Class Action Device:** The prosecution of separate actions by
 9 individual members of the Class would create a risk of inconsistent or varying adjudications. The
 10 questions of law and fact common to the members of the Class predominate over any questions
 11 affecting only individual members, including legal and factual issues relating to liability and
 12 damages. A class action is superior to other available methods for the fair and efficient
 13 adjudication of this controversy. Treatment as a class action will permit a large number of
 14 similarly situated persons to adjudicate their common claims in a single forum simultaneously,
 15 efficiently and without duplication of effort and expense that numerous individual actions would
 16 engender. The Class is readily definable and is one for which records should exist in the files of
 17 Defendants and their co-conspirators, and prosecution as a class action will eliminate the
 18 possibility of repetitious litigation. Class treatment will also permit the adjudication of relatively
 19 small claims by many members of the Class who otherwise could not afford to litigate an antitrust
 20 claim such as the ones asserted in this Complaint. This class action presents no difficulties of
 21 management that would preclude its maintenance as a class action.

22 **VIII. ANTICOMPETITIVE EFFECTS OF DEFENDANTS' CONSPIRACY**

23 188. The misconduct of Defendants described herein has produced antitrust injury, and
 24 unless restrained, will continue to produce many anticompetitive effects.

25 189. The Defendants' conspiracy has resulted in the competition in the importation,
 26 distribution and sale of Aluminum Capacitors and Tantalum Capacitors in the United States and in
 27 the State of California, being substantially and unreasonably restricted, lessened, foreclosed and

1 eliminated. This negative effect on competition will continue in the absence of intervention by this
2 Court.

3 190. The Defendants' conspiracy has resulted in the barriers to entry into the production,
4 distribution and sale of Capacitors in the United States and in the State of California being raised.

5 191. The Defendants' conspiracy has caused the prices of Aluminum Capacitors and
6 Tantalum Capacitors in the United States and in the State of California to rise and it will continue
7 to do so until this Court intervenes.

8 192. The Defendants' conspiracy has resulted in customers for Aluminum Capacitors and
9 Tantalum Capacitors in the United States and in the State of California being deprived of choice
10 with respect to the price, type, quality and manufacturer of Aluminum Capacitors and Tantalum
11 Capacitors that they can acquire.

12 193. The Defendants' conspiracy has resulted in the artificial restraint of the important,
13 distribution and sale of Aluminum Capacitors and Tantalum Capacitors in the United States and in
14 the State of California.

15 **IX. EQUITABLE TOLLING AND FRAUDULENT CONCEALMENT**

16 194. Throughout the Class Period, Defendants and their co-conspirators affirmatively
17 and fraudulently concealed their unlawful conduct.

18 195. Defendants falsely attributed the cause for the price increases of Aluminum
19 Capacitors and Tantalum Capacitors on rising input costs. For example, Tantalum Capacitor
20 manufacturers claimed that rising tantalum costs were affecting prices when that was not the
21 reality. These statements were made to conceal the true nature of the conspiracy.

22 196. Neither Defendants nor their co-conspirators told Plaintiff or other Class members
23 that they were fixing, raising, maintaining and stabilizing the price of Aluminum Capacitors and
24 Tantalum Capacitors. Accordingly, Plaintiff and Class members could not have discovered the
25 violations alleged herein until shortly before filing this Complaint. Defendants and their co-
26 conspirators conducted their conspiracy secretly, concealed the nature of their unlawful conduct
27 and acts in furtherance thereof, and fraudulently concealed their activities through various other
28 means and methods designed to avoid detection.

197. Defendants and their co-conspirators engaged in a successful price-fixing conspiracy, which they affirmatively concealed by, *inter alia*: (a) meeting secretly to discuss prices, customers and markets of Aluminum Capacitors and Tantalum Capacitors sold in the United States, in the State of California, and elsewhere; (b) using methods of communication in furtherance of the alleged conspiracy that were designed to avoid detection; (c) giving pretextual reasons for price increases of Aluminum Capacitors and Tantalum Capacitors; and (d) agreeing among themselves at meetings and in communications not to discuss publicly, or otherwise reveal, the nature and substance of the acts and communications in furtherance of their illegal scheme.

198. One way that the Defendants concealed the conspiracy was by claiming that higher product prices and increased production lead times were due to market conditions. For example, Defendants would claim that difficulties in procuring necessary raw materials justified higher prices and longer production lead times. This occurred in both the Aluminum Capacitors Market and the Tantalum Capacitors Market.

199. In regards to the Aluminum Capacitors Market, for example, in 2010, Defendants Nichicon, Nippon Chemi-Con and Panasonic each issued public statements attributing supply limitations and price quote adjustments to shortages of aluminum foil and increasing costs for other materials. Misrepresentations of this nature provided purportedly legitimate reasons for price increases, while concealing the existence of a global antitrust conspiracy.

200. In regards to the Tantalum Capacitors Market, for example, in 2010 and 2011, Defendants Vishay and Panasonic attributed supply limitations and pricing adjustments to the difficulties and costs of procuring tantalum necessary for the Tantalum Capacitors. Again, misrepresentations of this nature concealed the existence of the global antitrust conspiracy by providing purportedly legitimate explanations for price increases.

201. The reality, however, based on industry reports and industry data is that these explanations are not legitimate. In regards to Aluminum Capacitors, aluminum foil is an easily obtainable raw material and is one of the raw materials that is the least susceptible to price shocks. In regards to Tantalum Capacitors, as described above, Tantalum Capacitors is one of the largest uses for the element tantalum. As such, there is a strong business relationship between Tantalum

1 Capacitors manufacturers and tantalum mining operations and shipping operations. These
 2 business relationships allow Tantalum Capacitors strong influence with these operations and allow
 3 them to receive tantalum at excellent prices. As such, Tantalum Capacitors are not subject to the
 4 same economic impacts in the tantalum market as other purchasers.

5 202. In a 2010 "Tantalum Market Update," Defendant KEMET stated that:

6 "the tantalum capacitor industry is running at or near capacity, as
 7 witnessed by the increased lead times. **This immediate issue is not the**
 8 **result of raw material availability but due to the lack of investment in**
 9 **capacity over the last 10 years** - a consequence of industry pricing
 pressures which have driven margins to a point where we have been
 unable to realize reinvestment economic." (Emphasis added)

10 203. In light of the recent admission by at least capacitor manufacturer that they
 11 participated in a global antitrust conspiracy in the Capacitors Market, in hindsight, this statement
 12 provides important information about the Capacitors Market, particularly the Tantalum Capacitors
 13 Market. In essence, Defendant KEMET, the largest Tantalum Capacitors manufacturer, is
 14 acknowledging that representations that raw material shortages are to blame for price increases are
 15 false. Defendant KEMET is also acknowledging, through this statement, that the Defendants
 16 restricted supply during the Class Period, reducing their capacity to avoid industry pricing
 17 pressures. In light of the admissions of at least one capacitor manufacturer, it is now evident that
 18 supply restrictions were the result of collusive and illegal agreements.

19 204. Defendants have also used natural disasters as a cover for their global antitrust
 20 conspiracy. For example, from 2011 through 2013, Defendants Hitachi, Nippon Chemi-Con,
 21 Nichicon, Rubycon and ELNA have attributed production delays and price increases to the effects
 22 of the 2011 Great East Japan Earthquake and tsunamis off the coast of eastern Japan. In 2011,
 23 Defendants NEC TOKIN and ROHM claimed that production delays and price increases were
 24 caused by flooding in Thailand. While these real world events occurred, they were also used as a
 25 means to conceal the global antitrust conspiracy by giving Defendants an opportunity to blame
 26 price increases that were the result of collusive agreements on real world events. Even if these
 27 natural disasters could arguably have caused some of the price increase or production delay, they
 28 did not explain away the entirety of Defendants' pricing for Aluminum Capacitors and Tantalum

Capacitors. In fact, according to antitrust regulators, the information available to them indicates that these natural disasters may have caused the Defendants to increase their collusive and illegal acts in order to allow the Defendants to maintain profit margins during these difficult economic times.

205. As a result of Defendants' and their co-conspirators' fraudulent concealment, all applicable statutes of limitations affecting the Plaintiff and the Class's claims have been tolled. Plaintiff and the Class members did not discover, nor could have discovered through reasonable diligence, that Defendants and their co-conspirators were violating the antitrust laws. Plaintiff could not have discovered the existence of the combination and conspiracy alleged herein at an earlier date by the exercise of reasonable due diligence because of the deceptive practices and techniques of secrecy employed by Defendants and their co-conspirators to avoid detection and affirmatively conceal such violations.

206. Because the contract, combination, or conspiracy was kept secret by Defendants, Plaintiff was unaware of the fact that the prices of Aluminum Capacitors and Tantalum Capacitors were secretly raised, fixed, maintained or stabilized as alleged herein.

207. As a result of the fraudulent concealment of the conspiracy, Plaintiff asserts the tolling of the applicable statute of limitations affecting the causes of action by Plaintiff and the members of the Class.

X. INTERSTATE COMMERCE

208. Defendants manufactured, produced, distributed, and/or sold tens of billions of dollars' worth of Aluminum Capacitors and Tantalum Capacitors over the years, including during the Class Period, throughout the United States and throughout the State of California. Defendants manufactured, marketed and sold Aluminum Capacitors and Tantalum Capacitors, in a continuous and uninterrupted flow of interstate commerce, including through and into this District. Defendants' conduct, as alleged in this complaint, has caused direct, substantial, reasonably foreseeable and intended anticompetitive effects upon interstate commerce within the United States, and in the State of California, including within this District.

XI. CAUSES OF ACTION

FIRST CAUSE OF ACTION

Violation of Section 1 of the Sherman Act – 15 U.S.C. § 1

(Nationwide Class for Injunctive Relief)

209. Plaintiff incorporates and re-alleges each allegation set forth in the preceding paragraphs of this Complaint.

210. Beginning at least as early as January 1, 2005, and continuing thereafter to the present, Defendants and their co-conspirators entered into and engaged in a continuing agreement, understanding, combination and/or conspiracy in restraint of trade to artificially raise, fix, maintain, manipulate and stabilize prices for Aluminum Capacitors and Tantalum Capacitors in the United States, and its territories and possessions, in violation of Section 1 of the Sherman Act (15 U.S.C. § 1).

211. Defendants' acts in furtherance of their continuing agreement, understanding, combination and/or conspiracy were authorized, ordered, or done by their officers, directors, principals, agents, employees, or representatives who actively engaged in the management of Defendants' affairs.

212. Defendants' anticompetitive acts involved United States domestic commerce and import commerce, and had a direct, substantial, and foreseeable effect on interstate commerce by fixing, raising and stabilizing the prices of Aluminum Capacitors and Tantalum Capacitors throughout the United States, its territories and its possessions.

213. The conspiratorial acts and combinations have caused unreasonable restraints in the market for Capacitors.

214. As a result of Defendants' unlawful conduct, Plaintiff and the Class have been harmed by being forced to inflated, supra-competitive prices for Aluminum Capacitors and Tantalum Capacitors. Plaintiff and the Class have paid more for Aluminum Capacitors and Tantalum Capacitors than they would have paid in a competitive marketplace.

215. In formulating and effectuating the continuing contract, understanding, combination or conspiracy, Defendants and their co-conspirators did those things that they combined and

conspired to do, including but not limited to those acts, practices and course of conduct set forth in this complaint, such as the following:

- a. agree to charge prices at certain levels and otherwise to fix, increase, maintain and stabilize prices of Aluminum Capacitors and Tantalum Capacitors;
- b. agree to limit output of Aluminum Capacitors and Tantalum Capacitors;
- c. exchange information on prices and sales volumes;
- d. implement and monitor the conspiracy amongst cartel members;
- e. market Aluminum Capacitors and Tantalum Capacitors as being available at agreed upon prices;
- f. sell Aluminum Capacitors and Tantalum Capacitors at the agreed upon prices;

216. The activities described above have been engaged in by Defendants and their co-conspirators for the purpose of effectuating the unlawful agreement to fix, raise and stabilize the prices of Capacitors and to allocate the market for those products.

217. Defendants' conspiracy had the following effects, among others:

- a. Price competition in the market for Aluminum Capacitors and Tantalum Capacitors has been restrained, suppressed, and/or eliminated in the United States;
- b. Prices for Aluminum Capacitors and Tantalum Capacitors sold by Defendants and their co-conspirators, have been fixed, raised, stabilized and maintained at artificially high, inflated, supra-competitive levels throughout the United States.

218. As a direct and proximate result of Defendants' anticompetitive conduct, Plaintiff and the Class have been injured in their business or property and will continue to be injured in their business and property by paying more for Aluminum Capacitors and Tantalum Capacitors than they would have paid and will pay in the absence of the conspiracy.

219. The alleged contract, understanding, combination and/or conspiracy set forth in this complaint is a *per se* violation of the federal antitrust laws.

220. Plaintiff and the Nationwide Class are entitled to an injunction against Defendants, preventing and restraining the violations alleged herein.

SECOND CAUSE OF ACTION

Violation of the California Cartwright Act (Bus. & Prof. Code §§ 16720, *et seq.*) (California Class for Monetary Relief, Treble Damages, Injunctive and Declaratory Relief)

221. Plaintiff incorporates and re-alleges each allegation set forth in the preceding paragraphs of this Complaint.

222. Beginning at least as early as January 1, 2005, and continuing thereafter to the present, Defendants and their co-conspirators entered into and engaged in a continuing agreement, understanding, combination and/or conspiracy in restraint of trade to artificially raise, fix, maintain, manipulate and stabilize prices for Aluminum Capacitors and Tantalum Capacitors in the State of California, in violation of the Cartwright Act (Cal. Bus. & Prof. Code §§ 16720, *et seq.*).

223. Defendants' acts in furtherance of their continuing agreement, understanding, combination and/or conspiracy were authorized, ordered, or done by their officers, directors, principals, agents, employees, or representatives who actively engaged in the management of Defendants' affairs.

224. Defendants' anticompetitive acts involved commerce in the State of California and had a direct, substantial, and foreseeable effect on interstate commerce by fixing, raising and stabilizing the prices of Aluminum Capacitors and Tantalum Capacitors throughout the State of California.

225. The conspiratorial acts and combinations have caused unreasonable restraints in the market for Capacitors.

226. As a result of Defendants' unlawful conduct, Plaintiff and the Class have been harmed by being forced to inflated, supra-competitive prices for Aluminum Capacitors and Tantalum Capacitors. Plaintiff and the Class have paid more for Aluminum Capacitors and Tantalum Capacitors than they would have paid in a competitive marketplace.

227. In formulating and effectuating the continuing contract, understanding, combination or conspiracy, Defendants and their co-conspirators did those things that they

combined and conspired to do, including but not limited to those acts, practices and course of conduct set forth in this complaint, such as the following:

- a. agree to charge prices at certain levels and otherwise to fix, increase, maintain and stabilize prices of Aluminum Capacitors and Tantalum Capacitors;
- b. agree to limit output of Aluminum Capacitors and Tantalum Capacitors;
- c. exchange information on prices and sales volumes;
- d. implement and monitor the conspiracy amongst cartel members;
- e. market Aluminum Capacitors and Tantalum Capacitors as being available at agreed upon prices;
- f. sell Aluminum Capacitors and Tantalum Capacitors at the agreed upon prices;

228. The activities described above have been engaged in by Defendants and their co-conspirators for the purpose of effectuating the unlawful agreement to fix, raise and stabilize the prices of Capacitors and to allocate the market for those products.

229. Defendants' conspiracy had the following effects, among others:

- a. Price competition in the market for Aluminum Capacitors and Tantalum Capacitors has been restrained, suppressed, and/or eliminated in the State of California;
- b. Prices for Aluminum Capacitors and Tantalum Capacitors sold by Defendants and their co-conspirators, have been fixed, raised, stabilized and maintained at artificially high, inflated, supra-competitive levels throughout the State of California;
- c. Those who purchased Aluminum Capacitors and Tantalum Capacitors indirectly from Defendants and their co-conspirators have been deprived of the benefits of free and open competition.

230. As a direct and proximate result of Defendants' anticompetitive conduct, Plaintiff and the Class have been injured in their business or property and will continue to be injured in their business and property by paying more for Aluminum Capacitors and Tantalum Capacitors than they would have paid and will pay in the absence of the conspiracy.

231. The alleged contract, understanding, combination and/or conspiracy set forth in this complaint is a *per se* violation of the California Cartwright Act.

232. As a result of Defendants' violation of the California Cartwright Act (Cal. Bus. & Prof. Code §§ 16720, *et seq.*)

Section 16720 of the California Business and Professions Code, Plaintiff and members of the Class seek treble damages and their cost of suit, including a reasonable attorney's fee, pursuant to Section 16750(a) of the California Business and Professions Code.

THIRD CAUSE OF ACTION

Violation of the California Unfair Competition Law (Bus. & Prof. Code §§ 17200, *et seq.*)

(California Class for Monetary Relief, Injunctive and Declaratory Relief)

234. Plaintiff incorporates and re-alleges each allegation set forth in the preceding paragraphs of this Complaint.

235. Defendants have engaged in unfair competition in that its business practices were unfair, illegal and fraudulent in violation of the California Unfair Competition Law (Cal. Bus. & Prof. Code §§ 17200, *et seq.*)

236. Defendants' business practices are unfair because the Defendants' conduct, as alleged in this complaint, threaten significant harm to California consumers, including Plaintiff and the members of the Class, as well as significant harm to competition in the State of California. There is no benefit to the Defendants' conduct. Even if there exists any argument that the Defendants' conduct provided any benefit to consumers and to competition, the injury and harm caused by this conduct outweighs any purported benefits.

237. Defendants' business practices are illegal in that the Defendants' conduct, as alleged in this complaint, violates federal antitrust law (15 U.S.C. §§ 1, *et seq.*) and California antitrust law (Cal. Bus. & Prof. Code §§ 16720, *et seq.*)

238. Defendants' business practices are also fraudulent in that Defendants' engaged in business practices that were reasonably likely to deceive consumers. Specifically, Defendants concealed from consumers, including Plaintiff and members of the proposed Class, that they were

engaged in a conspiracy to fix, stabilize, raise and maintain the prices of Aluminum Capacitors and Tantalum Capacitors to supra-competitive levels.

239. This claim is instituted pursuant to Sections 17203 and 17204 of the California Business and Professions Code, to obtain restitution from these Defendants for acts, as alleged herein, that violated Section 17200 of the California Business and Professions Code. Plaintiff and members of the proposed Class are entitled to full restitution and/or disgorgement of all revenues, earnings, profits, compensation, and benefits that may have been obtained by Defendants as a result of such business acts or practices.

240. The acts, omissions, misrepresentations, practices and non-disclosures of Defendants, as alleged herein, constituted a common, continuous, and continuing course of conduct of unfair competition within the meaning of California Unfair Competition Law.

241. The illegal conduct alleged herein is continuing and there is no indication that Defendants will cease engaging such activity in the future.

242. The unlawful and unfair business practices of Defendants, and each of them, as described above, have caused and continue to cause Plaintiffs and the members of the proposed Class to pay supra-competitive and artificially-inflated prices for Aluminum Capacitors and Tantalum Capacitors. Plaintiff has suffered an injury in fact in that Plaintiff has acquired Aluminum Capacitors and Tantalum Capacitors and paid supra-competitive and artificially inflated prices for such Aluminum Capacitors and Tantalum Capacitors. The prices of Aluminum Capacitors and Tantalum Capacitors would not have been artificially inflated but for the anticompetitive conduct of the Defendants.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays as follows:

A. That the Court determines that this action may be maintained as a class action under Rule 23 of the Federal Rules of Civil Procedure, appoint Plaintiff as Class Representative for both the Nationwide Class and the California Class, appoint Plaintiff's counsel of record as Class Counsel for both the Nationwide Class and the California Class, and direct that notice of this action

as provided by Rule 23(c)(2) of the Federal Rules of Civil Procedure, be given to both the Nationwide Class and the California Class;

B. The unlawful conduct, conspiracy or combination alleged herein and the acts done in furtherance thereof by Defendants and their co-conspirators, be adjudged and decreed:

a. An unreasonable restraint of trade or commerce in violation of Section 1 of the Sherman Act (15 U.S.C. § 1) and in violation of the California Cartwright Act (Cal. Bus. & Prof. Code § 16720, *et seq.*); and

b. A *per se* violation of the Sherman Act and the California Cartwright Act.

C. Plaintiff and the California Class recover damages, to the maximum extent allowed under the antitrust and consumer protection laws of the State of California, and that a joint and several judgment in favor of Plaintiffs and the members of the California Class be entered against Defendants in an amount to be trebled to the extent such laws permit;

D. Defendants, their affiliates, successors, transferees, assignees and other officers, directors, partners, agents and employees thereof, and all other persons acting or claiming to act on their behalf or in concert with them, be permanently enjoined and restrained from:

a. continuing, maintaining, or renewing the conduct, conspiracy, or combination alleged herein, or from entering into any other conspiracy or combination having a similar purpose or effort, from adopting or following any practice, plan, program, or device having a similar purpose or effect; and

b. communicating or causing a communication to any other person engaged in the manufacture, distribution, or sale of any relevant product except to the extent necessary in connection with a bona fide sales transaction between the parties to such communications.

E. Plaintiff and the California Class be awarded pre- and post-judgment interest as provided by law, and that such interest be awarded at the highest legal rate from and after the date of service of this Complaint;

F. Plaintiff and the Nationwide Class and the California Class recover their costs of suit, including reasonable attorneys' fees, as provided by law; and

1 G. Plaintiff and the Nationwide Class and the California Class have such other and
2 further relief as the case may require and the Court may deem just and proper.

3
4 Dated: October 27, 2014

Respectfully submitted,

5 **MINAMI TAMAKI**

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7 By: /s Jack W. Lee
JACK W. LEE

8 *Attorneys for Plaintiff and the Proposed Class*

9
10 Dated: October 27, 2014

Respectfully submitted,

11 **GRAY, PLANT, MOOTY, MOOTY & BENNETT**

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13 By: /s Daniel R. Shulman
DANIEL R. SHULMAN

14 *Attorneys for Plaintiff and the Proposed Class*

JURY DEMAND

Plaintiff demands a jury trial, pursuant to Federal Rule of Civil Procedure 38(b), of all issues so triable.

Dated: October 27, 2014

Respectfully submitted,

MINAMI TAMAKI, LLP

By: /s Jack W. Lee
JACK W. LEE

Attorneys for Plaintiff and the Proposed Class

Dated: October 27, 2014

Respectfully submitted,

GRAY, PLANT, MOOTY, MOOTY & BENNETT

By: /s Daniel R. Shulman
DANIEL R. SHULMAN

Attorneys for Plaintiff and the Proposed Class